

# EFFECT OF INCREASING GROUP SIZE ON GROWER-FINISHER PIGS

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## Introduction

There is growing interest in the swine industry to house grower-finisher pigs in larger pens, increasing group size. Research on management and productivity of grower-finisher pigs has generally focussed on small group sizes. As a result, there is a need to understand the effects of increasing group size to ensure this industry trend is beneficial to producers.



The objective of this study was to determine the effects of 10, 20, 40 and 80 pigs per pen on the production and health of grower-finisher pigs.

## Experimental Procedure

Four 12-week trials of two groups of 10, and one group each of 20, 40, and 80 pigs per pen were evaluated. An equal number of males and females were used in each pen. Initial body weight was  $23.2 \pm 0.2$  kg. On wet/dry ad libitum feeder was provided for every 10 pigs. Space per pig was constant between group sizes. Injury scores were measured at 48-hour post-regrouping on four body zones, average daily gain (ADG), average daily feed intake (ADFI) and percentage of pigs removed from trial were recorded.

## Results

Injury scores were similar among groups but flank injuries were more severe for females than for males. Ear injuries were not significantly different between group sizes and sexes.

ADG throughout the entire study was similar among group sizes (Figure 1). Significant differences in gain were only observed during the first six weeks without any consistent pattern.

ADFI over the 12 weeks was similar among the group sizes (Figure 2). As a result, feed efficiency for the entire period was similar for the group sizes of 10, 20, 40 and 80 pigs per pen.

The percentage of pigs removed did not significantly differ among group sizes (Figure 3).

## Implications

If adequate amounts of space are provided for grower finisher pigs, the use of larger group sizes does not appear to either be detrimental to the productivity of health of the pigs, or significantly different compared to smaller group sizes.

## Acknowledgements

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Figure 1. Effect of group size on ADG for the entire study

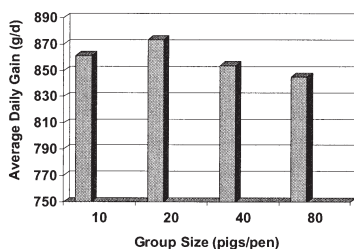


Figure 2. Effect of group size on the overall ADFI

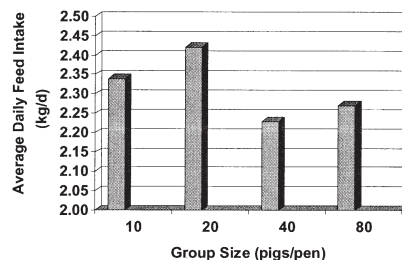


Figure 3. Effect of group size on the percentage of pigs removed

