

The Effect of Feeding System on the Presence of Salmonella

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Background

Healthy-appearing swine can harbour *Salmonella* spp in their intestine. If carcasses become contaminated at slaughter, meat could pose a health risk to consumers if improperly handled. Of particular concern are species of *Salmonella* with multiple antibiotic resistance. Although on-farm control of *Salmonella* is difficult, there is speculation that dietary factors are important and could be useful in reducing *Salmonella* shedding.

Objectives

- To determine if the presence of *Salmonella* spp in the manure of pigs fed liquid feed is less than in the manure of pigs fed traditional dry ration.
- To determine the antimicrobial resistance pattern of *Salmonella* isolated from pigs fed on a liquid diet vs a dry diet.

Results

Twenty manure samples collected from 43 farms (22 farms using liquid feed and 21 dry feeders) were cultured for *Salmonella* and isolates characterized for serovars and antibiotic resistance.

	Dry Feed	Liquid Feed
Number of positive samples	28	3
Total number of samples	420	440
Positive farms/total number of farms	8/21	3/22
Number of isolates with multiple resistance	15	1

Take Home Message

- Liquid feeding appears to be associated with a greatly reduced risk of finding pigs shedding *Salmonella*.

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