

Sanitation in the Food Industry:

preventive measures and validation

PRÉSENTATION PAR AFFICHE SCIENTIFIQUE

**CHANGING THE TEXTURE OF PIG FEED CAN REDUCE RISK OF
SALMONELLA ENTERING THE FOOD PRODUCTION CHAIN**

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The influence of the composition and the presentation (wet/dry) of the pigs feed for the mitigation of *Salmonella* spp. prevalence in the herd and the reduction of the contamination risks at slaughter is well documented. But then the influence of the texture (mashed or pelleted) and/or the particle size of a dry feed has not yet been studied. To do so, 144 piglets, known to be in contact with *Salmonella* spp. were given a diet that varied only by the particle size (500, 750 or 1250 µm) and the texture (mashed or pelleted) between the six groups. During the finishing period, blood and feces samples (day 0, 21, 45 and 88) and colon and caecum samples at the slaughterhouse were taken. A reduction of *Salmonella* spp. excretion ($P < 0,05$) was observed after 21 and 88 days and in the colon at the slaughterhouse for pigs fed mashed feed compared to those fed pelleted feed. Also, after only 21 days of specific diet more pigs ($P < 0,05$) from the pelleted 500 µm group were excreting *Salmonella* spp. than those in groups of mashed 500 and 1250 µm and pelleted 1250 µm demonstrating the importance of both tested factors. It is thus possible to reduce pigs *Salmonella* spp. excretion by changing the feed texture and/or particle size.