

ORAL VACCINATION OF FARROWING PIGS AGAINST COLIBACILLOSIS IN A FIELD
EXPERIMENT

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Our experimental study on conventional pigs [Dziąba, Szykiewicz et al 1980/ with formalized *E. coli* vaccine, and Porter /1974/ and Baljer /1975/ with heat inactivated vaccine, showed that oral immunization stimulated the increase of live body weight gains of animals. The purpose of this study was to determine the effect of oral vaccination in farrowing pigs on their healthiness and live body weight gains of 11,100 animals on two industrial pig farms.

Vaccine: formalized bacterin was prepared from the five most common enteropathogenic serotypes of *E. coli* in Poland.

Immunization schedule: 11,100 pigs were orally vaccinated with one daily dose of 5×10^{10} cells for ten days. There were 9,500 control animals.

Result : oral vaccination reduced the illness associated with *E. coli* and the mortality rate dropped from 4.06% to 2.9% in vaccinated animals in comparison to control animals.

Table 1 shows the monthly live body weight gains measured in 25% of vaccinated and control animals.

month after vac- cina- tion	vaccinated pigs		non vaccinated pigs	
	No of pigs	increase of live body weight gain in g	No of pigs	increase of live body we weight gain in g
1	25% from 11.100 pigs	382.5	25% from 9.494 pigs	373.6
2		749.0		616.4
3		627.4		651.1
4		629.9		567.8

The mean live body weight gains after farrowing time on farm "D" was 108,4 kg in vaccinated and 98,6 kg in control animals. On the second farm "B" the weights were 82,8 kg and 75,8 kg respectively.

Conclusions: Our results suggested that oral vaccination of farrowing pigs with a formalized polyvalent vaccine has a stimulatory effect on body weight gain, and decrease the scouring and mortality associated with *E. coli*.

Selected references: Baljer G.: Tierarztl. prax. 1975, 3, 417; Porter P., Kenworthy W. and Allen W.D.: Vet.Rec., 1974, 95, 99; Dziąba K. A., Szykiewicz Zb., Binek M., Jakubowski T.: I.P.V.S.Proceedings, 1980, 165.