these experiments suggest that a particular period exists around the 30th and 60th day of life of piglets having passive immunity. During this period, maternal passive immunity protects piglets against virulent infections, but also allows induction of active immunity following vaccination with live vaccine. New investigations are needed to determine limits and characteristics of this period.

## Immune response in piglets. The effect of specific passive immunity on immune response against an inert antigen, hen egg-white lysozyme

P. ROUZÉ, M. HOUDAYER and J. J. METZGER\*

Laboratoire de Pathologie Porcine, I. N. R. A., 78850 Thiverval-Grignon

\* Station d'Immunologie et de Virologie

In previous reports, we already showed that piglets have been actively immunized with lysozyme in the presence of specific antibodies acquired by the colostral way or by intraperitoneal injection. The purpose of this new experiment, realized without any adjuvant was to study the role of this parameter. In these conditions the injection of increasing doses of lysozyme, even in the absence of any specific antibody, stimulated a less efficient immunization. This active immunity was inhibited by rather low passive antibody amounts. This result led us to define the passive antibody threshold beyond which lysozyme antigenic stimulation was ineffective and to show that its level was lowered in the absence of adjuvant. In this paper, the practical implication of this threshold concept is discussed.

In the same experiment, we compared the effect of the stimulation with a living and an inert antigen, namely hog-cholera virus vaccine and lysozyme, in passively immune animals. We observed a narrow parallelism between these two systems. It appeared, at last, that the challenge performed with the fully virulent Alfort strain of Swine fever virus led to an immunodepression which tends to be suppressed by the vaccination.

## Respiratory disease syndroms in the young pig. Pathogenic properties of Ascaris suum

J. P. RAYNAUD, A BOUCHET and G. BRUNAULT

Station de Recherches et Développement vétérinaire, Pfizer International, B. P. 42, 37400 Amboise (France)

The pathogenic properties of *Ascaris suum* were checked on mice and an attempt was made to determine the dose which given to swine is not able to cause any rise in the blood level of eosinophilic cells.

— Embryonated eggs can easily give respiratory symptoms in young pigs of 15 kg b.w. Even