

## INFLUENCE OF SPECIFIC GASEOUS ATMOSPHERE AND SERA ON MATURATION AND FERTILIZATION OF BOVINE OOCYTES IN VITRO

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The present experiment was designed to identify the possible effects of sera and specific gaseous atmosphere of 5 % O<sub>2</sub>, 5 % CO<sub>2</sub>, 90 % N<sub>2</sub> on the embryon development in vitro. Sera (fetal calf serum and oestrous cow serum) were added to the culture medium to determine the frequency of in vitro maturation, fertilization cleavage to 8–16 cells.

The gaseous atmosphere with 5 % O<sub>2</sub>, 5 % CO<sub>2</sub>, 90 % N<sub>2</sub> increased oocyte maturation and embryo development on the average by 4 %. The addition of oestrous cow serum did not affect the cleavage and development of zygotes. Fetal calf serum is one of the factors for in vitro maturation, fertilization and development to 16 cells.

**Keywords:** oocytes, maturation, cleavage.