In ovo injection as a tool for the development of poultry production

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Ensuring the health of chicks is one of the most important challenges of modern poultry production. One technique for ensuring the proper development of birds at the incubation stage is the injection of protective or nutritional substances into the egg at the embryonic stage. This makes it possible to improve the quality of the birds, to increase their production potential, and to vaccinate them early. According to the available literature, substances administered *in ovo* include amino acids, carbohydrates, probiotics and many others. There are several routes of *in ovo* injection of stimulants: into the air chamber, ovarian follicle, or amniotic sac. The site of injection depends on the type of substance and on when the procedure is performed. The purpose of this study was to provide an introduction to the topic of *in ovo* injection as a tool in poultry production.

KEY WORDS: embryonic development, embryo nutrition, chick survivability, vaccination