U.D.K. 636.4:612.3:68.01.09



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SCIENTIFIC ACTIVITY DURING XX CENTURY WITH THE STUDY OF QUESTIONS ABOUT THE DIGESTION IN INTESTINES OF PIGS

Summary

In Ukraine, the pig has been and remains a priority, the national agricultural sector. The cost of feed is the largest share in the cost of pork production and yet here lie the largest reserves for their decline. Therefore, efficiency of feed is an important link in the complex of measures to increase the production of pork.

Despite the importance of this area, proper development he has not got. Priority in establishing research approaches in the physiology of digestion in pigs owned by Ukrainian scientists, whose research is of considerable value for the study of the physiology of digestion steps pigs.

To analyze the current state of scientific research and source base problems, make periods of scientific thought on the physiology of digestion in the gut of pigs by studying primary sources of literature to highlight the achievements of scientists on problems of the physiology of digestion in the gut of pigs.

Among the methods for studying intestinal digestion most widely used surgical options for blending a variety of pancreatic fistulas (O. Syneschokov, 1939, O. Kvasnitskiy, 1951). When using these methods pancreatic juice contains impurities intestinal juice enzymes and its already activated. Later V. Telepnov in 1965 offered new versions of the gastro-pancreatic fistulas for pigs.

An effective method is the imposition of a chronic pancreatic fistula with duodenal bridge the so-called tee for Syneschokov (1953). This method, along with saving juice for animals makes it possible to study the pancreas secretion in relation to the processes of digestion within the duodenum. During the experiment conducted accounting pancreatic secretion and evacuation chime.

The study of the secretion of bile pigs in chronic experiments is difficult because of anatomical and topographical features bile duct. OD Syneschokov (1947) and V.S. Kazachok (1964) proposed operative surgical methods based on ligation of the common bile duct and gall bladder integrity violation.

In the study of intestinal juice secretion and intestinal absorption process using a technique isolated areas of the intestine by way Thiry and Thiry-Vella.

In the study of intestinal digestion pigs impose a common chronic fistula and external bridges. Simple chronic fistula put on different parts of the intestine (both thin and thick sections) depending on the purpose of the experiment. In the 80-90 years of the twentieth century. received a special distribution radiokapsul that give information on telemetry and other enzymatic processes in the gastrointestinal tract.

The rate of passage of food through different parts of the gastrointestinal tract study on anastomoznyh or polifistulnyh animal coloring film grain or entering the digestive tract specific markers (polyethylene, chromium oxide).

Matters relating to growth intestine and its departments involved at various times by such scholars as A. Kvasnitskiy, 1951; M. Zhabaliyev, 1959; D.Hrudev, 1971; V. Kabanov, 1972 and others.

The secretion of pancreatic juice in pigs according to O.D. Syneschokov (1939) is continuous. He found that it does not stop even after prolonged starvation.

Research conducted by A.V. Kvasnytsky and O.M. Bakyeyeva on pigs aged 1 to 10 months., Support the conclusion O.D. Syneschokov that the allocation of stomach juice is continuous.

In 1974 Y. Larin exploring this issue cites another function performed by the bile, and is involved in wall digestion: its presence in the intestine creates favorable conditions for the fixation of the enzyme on the surface of the intestine.

Investigated the chemical composition of bile pig A.A. Aliyev (1975) noted that the concentration of total lipids in it high and is 400 mg%.

In 1974, A.G. Zusmanovsky were found in the composition of bile pig intracellular enzymes that are normally present in the blood: lactate, glutamine, alanine and glutamine, aspartic aminotransferase, aldolase, glucose-6-phosphatase, fosfoheksoizomerazy and alkaline phosphatase.

Studying the role of bile in the digestive process pigs E.Z. Tkachev concludes that bile acids, which came into the intestine with bile play an important role in the assimilation of fats.

The mechanism of formation and secretion of bile in pigs studied a number of scholars, such as P.N. Kratinova, O.D. Stepanov, V.S. Kozachok, R.S. Ledyaykin, A. Aliev and O. Zusmanovskyy.

Examining the issue of the level of daily secretion of intestinal glands A. Kite, 1964; V. Severin, 1971; Yuri Nikitin, 1974 came to the conclusion that it is about 200 ml. 1 m length of the intestine. If conditional transfer this amount to the entire length of the small intestine (20 m), the level of secretion equal to 4 liters per day.

Analyzed the achievements of scientists studying the issue for digestion in the intestines. The main directions of scientific activity were: the development of new and improvement of existing methods for the study of intestinal digestion and exocrine activity of the pancreas; studied anatomical and morphological features of the intestine; structure and regulation of pancreatic secretion of bile secretion;

secretory glands of the intestine, which is a theoretical and practical interest for practice.