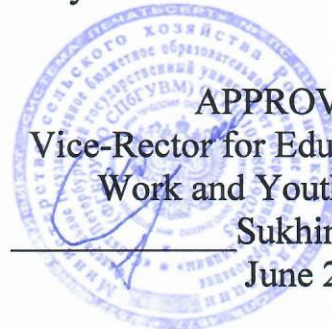


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**Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution
of Higher Education
"St. Petersburg State University of Veterinary Medicine"**



**APPROVED BY
Vice-Rector for Educational
Work and Youth Policy
Sukhinin A.A.
June 27, 2025**

Department of Animal Feeding and Breeding

EDUCATIONAL WORK PROGRAM

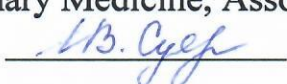
for the discipline

"DIETETICS"

**The level of higher education
SPECIALIST COURSE**

**Specialty 36.05.01 Veterinary Medicine
Profile: «General clinical veterinary medicine»
Full-time education
Education starts in 2025**

**Reviewed and adopted
at the meeting of the department
on June 24, 2025
Protocol No. 11**

**Head of the Department
of Animal Feeding and Breeding,
Candidate of Veterinary Medicine, Associate Professor**
 **Suyazova I.V.**

**Saint Petersburg
2025**

1. AIMS AND OBJECTIVES OF THE DISCIPLINE

The main purpose of the discipline in the training of veterinarians is to give students basic knowledge on normalized physiologically sound dietary feeding of cats and dogs as the main way to prevent metabolic disorders, increase the body's resistance to diseases of various etiologies.

To achieve this goal, it is necessary to solve the following tasks:

a) the general educational task is to in-depth mastering by students of modern technology of dietary feeding of cats and dogs, taking into account the physiological characteristics of digestion, aimed at recovery and prevention of diseases of various etiologies and metabolic disorders in the body;

b) the applied task highlights issues related to the balance of the diets of breeding, pregnant and lactating cats and dogs, kittens and puppies, the use of this knowledge in the diagnosis, prevention and treatment of diseases;

c) a special task is the ability to theoretically analyze the problems of dietary feeding of cats and dogs in various diseases and metabolic disorders, the rational use of modern achievements of domestic and foreign science and practice.

2. THE LIST OF THE PLANNED RESULTS OF THE DISCIPLINE (MODULE), CORRELATED WITH THE PLANNED RESULTS OF THE REALISED EDUCATIONAL PROGRAM

As a result of mastering the discipline, the student prepares for the following types of activities, in accordance with the educational standard of the FSE on 36.05.01 "Veterinary Medicine".

The field of professional activity:

13 Agriculture

The student's competencies formed as a result of mastering the discipline

The study of the discipline should form the following competencies: a) professional competencies (PC)

PC-9 Development of recommendations for special feeding of sick animals for therapeutic purposes

PC-9 ID-1 To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.

3. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF THE MPEP

Discipline B1.V.08 "Dietetics" is a discipline of Block 1 of the part formed by participants in educational relations of the federal state educational standard of higher education in the specialty 36.05.01 "Veterinary Medicine".

Mastered in the 5th semester (full-time)

When teaching the discipline "Dietetics", the knowledge and skills acquired by students in mastering the disciplines of morphology, animal physiology, inorganic and biological chemistry, and animal feeding are used. Knowledge of the discipline "Dietetics" is necessary for the study of disciplines such as: dentistry, internal diseases, clinical practice, medical and industrial practice.

4. THE SCOPE OF DISCIPLINE AND TYPES OF ACADEMIC WORK

4.1. The scope of the discipline for full-time education

Type of educational work	Hours	Semesters
		5
Classroom classes (total)	32	32
Including:	-	-
Lectures, including interactive forms	16	16
Practical lessons (PL), including interactive forms, among which are:	16	16
practical training (PT)	4	4
Self-study	40	40
Type of intermediate and final certification (test, exam)	Test	Test
Total labor intensity hours/credits	72/2	72/2

5. THE CONTENT OF THE DISCIPLINE AND TYPES OF CLASSES

5.1. The content of the discipline (full-time education)

#	The title	Achieved competences	Semester	Types of academic work, including students' self-study and labor intensity (in hours)			
				Lectures	Practical lessons	Practical training	Self-study
1.	Peculiarities of digestion in dogs and cats, which determine the specifics of their feeding. Key nutrients. The needs of dogs and cats for energy and nutrients.	PC-9 ID-1	5	2	4	-	6
2.	Ingredients of the diets of dogs and cats (vegetable, animal origin, vitamins, minerals and antioxidants). Nutritional value of plant and animal feed used in feeding dogs and cats.	PC-9 ID-1	5	2	4		4
3.	Industrial feed for dogs and cats: types of feed, production technology, advantages and disadvantages	PC-9 ID-1	5	2	2	2	4
4.	Distinctive features of feeding dogs and cats of different ages (puppies and kittens, adult animals, elderly). Normalized feeding of dogs and cats. Principles of making diets for dogs and cats.	PC-9 ID-1	5	2	-	2	4
5.	The concept of diet therapy. The theoretical foundations of feeding a sick and healthy animal.	PC-9 ID-1	5	2	-	-	4
6.	Feeding cats and dogs with metabolic disorders	PC-9 ID-1	5	2	1		6
7.	Feeding dogs and cats with diseases of the digestive system. The main feeds used in the diets of sick animals, methods of preparation and norms of feeding these feeds	PC-9 ID-1	5	2			6
8.	Correction of metabolic disorders in urological diseases in dogs and cats. Features of nutrition in chronic kidney disease. Dietetics in dermatology.	PC-9 ID-1	5	2	1		6
TOTAL FOR THE 5TH SEMESTER:				16	12	4	40

6. THE LIST OF EDUCATIONAL AND METHODOLOGICAL SUPPORT FOR STUDENTS' SELF WORK ON THE DISCIPLINE

Correct organization and planned self – work stimulate research and creative activity of students. Self-work should be understood not only as the ability to make independent conclusions and to apply the knowledge, gained in practice, but also as the ability to organize their activities without outside help.

6.1. Guidelines for self -work

6.2. Literature for self-work

1. P. Pibo, V. Bjurge, D. Elliot. Encyclopedia of clinical nutrition of cats. – LLC "Advertising Industry", 2009. – 518 p.
2. P. Peebo, V. Bjurge, D. Elliot. Encyclopedia of clinical dog nutrition. – Media Line LLC, 2007. – 486 p.

7. THE LIST OF BASIC AND ADDITIONAL LITERATURE NECESSARY FOR THE EDUCATION OF THE DISCIPLINE

7.1. Basic literature

1. Small Animal Clinical Nutrition
http://www.markmorrisinstitute.org/sacn5_download.html (accessed: 06/24/2025).

7.2. Additional literature

1. L. Lewis, M. Morris (Jr.), M. Hand Feeding dogs and cats
<http://www.linnafauna.eu/publ/dis/food.pdf> (accessed: 06/24/2025).

8. THE LIST OF RESOURCES OF THE INFORMATION AND TELECOMMUNICATION NETWORK "INTERNET" NECESSARY FOR EDUCATION OF THE DISCIPLINE

Electronic library systems

1. ELS "SPBGUVM"
2. Legal reference system "ConsultantPlus"
3. University information system "RUSSIA"
4. Full-text database POLPRED.COM
5. Scientific electronic Library ELIBRARY.RU
6. Russian Scientific Network
7. Full-text interdisciplinary database on agricultural and environmental sciences ProQuest AGRICULTURAL AND ENVIRONMENTAL SCIENCE DATABASE
8. Electronic books of the publishing house "Prospekt Nauki"
<http://prospektnauki.ru/ebooks/>

9. METHODOLOGICAL GUIDELINES FOR STUDENTS ON EDUCATION OF THE DISCIPLINE

Methodological recommendations for students are a set of recommendations and explanations that allow them organize the process of studying this discipline optimally.

The content of methodological recommendations, as a rule, may include:

- Tips on planning and organizing the time needed to study the discipline. Description of the sequence of actions of the student, or the "scenario of studying the discipline".

Morning time is the most effective for academic work (from 8-14 hours), followed by afternoon time (from 16-19 hours) and evening time (from 20-24 hours). The most difficult material is recommended to be studied at the beginning of each time interval after rest. After 1.5 hours of work, a break is required (10-15 minutes), after 4 hours of work, the break should be 1 hour. Part of the scientific organization of labor is the master of the technique of mental labor. Normally, a student should devote about 10 hours a day to studying (6 hours at university, 4 hours at home).

The methodology of work when taking notes of oral presentations differs significantly from the methodology of work when taking notes of written sources.

By taking notes of written sources, the student has the opportunity to read again the desired passage of the text, reflect on it, highlight the main thoughts of the author, briefly formulate them, and then write them down. If necessary, he can also note his attitude to this point of view. Listening to the lecture, the student should transist most of the complexity of the above-mentioned works for another time, trying to use every minute to record the lecture, and not to comprehend it - there is no time left for this. Therefore, when taking notes of a lecture, it is recommended, to leave separate fields on each page for subsequent entries in addition to the summary.

After recording a lecture or making a summary of it, you should not leave work on the lecture material before preparing for the test. It is necessary to do as early as possible the work that accompanies taking notes of written sources, the last could not be done during the recording of the lecture - read your notes, deciphering individual abbreviations, analyze the text, establish logical connections between its elements, in some cases show them graphically, highlight the main thoughts, mark issues, requiring additional processing, in particular, the teacher's consultations.

When working on the text of the lecture, the student should pay special attention to the problematic issues, raised by the teacher, during the lecture, as well as to his assignments and recommendations.

For each lecture, practical lesson and laboratory work, classification cod, topic, list of issues under consideration, volume in hours and links to recommended literature are provided. For classes conducted in interactive forms, its organizational form should be indicated: computer simulation, business or role-playing game, analysis of a specific situation, etc.

- Recommendations for preparing for practical classes

Practical (seminar) classes are an important part of the professional training of students. The main purpose of conducting practical (seminar) classes is to form students' analytical, creative thinking through the acquisition of practical skills. Practical classes are also conducted in order to deepen and consolidate the knowledge gained in lectures and in the process of independent work on normative documents, educational and scientific literature. For student, it is necessary, to study or repeat theoretical material on a given topic when preparing for a practical lesson for students.

When preparing for a practical lesson, the student is recommended to follow the following algorithm;

- 1) get acquainted with the plan of the upcoming lesson;

2) study the literature sources that have been recommended and familiarize yourself with the introductory notes to the relevant sections.

Methodological guidelines for practical (seminar) classes in the discipline, along with the work program and schedule of the educational process, refer to methodological documents that determine the level of organization and quality of the educational process.

The content of practical (seminar) classes is recorded in the working curricula of the disciplines in the sections "List of topics of practical (seminar) classes".

The most important component of any form of practical training are tasks. The basis of the task is an example that is understood from the standpoint of the theory developed in the lecture. As a rule, the main attention is paid to the formation of specific skills, which determines the content of students' activities - problem solving, laboratory work, clarification of categories and concepts of science, which are a prerequisite for correct thinking and speech.

• Practical (seminar) classes perform the following tasks:

- stimulate regular study of recommended literature, as well as attentive attitude to the lecture course;

- consolidate the knowledge gained in the process of lecture training and independent work on literature;

- expand the scope of professionally significant knowledge, skills, and abilities;

- allow you to verify the correctness of previously acquired knowledge;

- initiate skills of independent self-thinking, oral presentation;

- contribute to the free use of terminology;

- provide the teacher with the opportunity to systematically monitor the level of independent work of students.

Methodological guidelines for practical (seminar) classes on the discipline should be focused on modern business conditions, current regulatory documents, advanced technologies, the latest achievements of science, technology and practice, modern ideas about certain phenomena, the studied reality.

• Recommendations for working with literature.

Working with literature is an important stage of the student's self-work on mastering the subject, contributing not only to the consolidation of knowledge, but also to the expansion of horizons, mental abilities, memory, the ability to think, express and confirm personal hypotheses and ideas. In addition, the skills of research work necessary for further professional activity are developed.

When starting to study the literature on the topic, it is necessary to make notes, extracts, notes. It is mandatory to take notes of the works of theorists, which allow us to comprehend the theoretical basis of the study. For the rest, you can limit yourself to summary from the studied sources. All summaries and quotations must have the exact "return address" (author, title of the work, year of publication, page, etc.). It is advisable to write an abbreviated title of the question to which the extract or quotation refers. In addition, it is necessary to learn how to immediately compile a file of special literature and publications of sources, both proposed by the teacher and identified independently, as well as refer to bibliographic reference books, chronicles of journal articles, book chronicles, abstract journals. At the same time, publications of sources (articles, book titles, etc.) should be written on separate cards, which must be filled in according to the rules of bibliographic description (surname, initials of the author, title of the work. Place of publication, publisher, year of publication, number of pages, and for journal articles – the name of the journal, year of publication, page numbers). On each card, it is advisable to record the thought of the author of the book or a fact from this book on only one specific issue. If the work, even in the same paragraph or phrase, contains more judgments or facts on another issue, then they should be written out on a separate card. The presentation should be concise, accurate, without subjective assessments. On the back of the card, you can make your own notes about this book or article, its content, structure, on which sources it is written, etc.

- Explanations about working with control and test materials for the course, recommendations for completing homework.

Testing is a control that allows you to determine whether the actual behavior of the program corresponds to the expected one by performing a specially selected set of tests. A test is the fulfillment of certain conditions and actions necessary to verify the operation of the function under test or part of it. Each question in the discipline must be answered correctly by choosing one option.

10. EDUCATIONAL WORK

As part of the implementation of the discipline, educational work is carried out to form a modern scientific worldview and a system of basic values, the formation and development of spiritual and moral, civil and patriotic values, a system of aesthetic and ethical knowledge and values, attitudes of tolerant consciousness in society, the formation of students' need for work as the first vital necessity, the highest value and the main way to achieve success in life, to realize the social significance of your future profession.

11. THE LIST OF INFORMATION TECHNOLOGIES USED IN THE IMPLEMENTATION OF THE EDUCATIONAL PROCESS

11.1 Information technologies

For the educational process of the discipline is previewed the use of information technologies:

- practical classes using multimedia;
- interactive technologies (dialogues, collective discussion on various topics for realization a particular educational and professional task);
- interaction with students via e - mail;
- community work in the electronic information and educational environment of St. Petersburg State University: <https://spbguvm.ru/academy/eios/>

11.2. Software

The list of licensed and free- distributed software, including national programs

№ п/п	Technical and computer programs recommended by sections and topics of the program	License
1	MS PowerPoint	67580828
2	LibreOffice	free software
3	OS Alt Education	AAO.0022.00
4	ABIS “ MARK-SQL”	02102014155
5	MS Windows 10	67580828
6	System Consult Plus	503/KJI
7	Android OS	free software

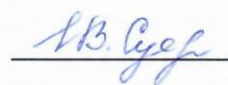
12. THE MATERIAL AND TECHNICAL BASE NECESSARY FOR THE IMPLEMENTATION OF THE DISCIPLINE EDUCATIONAL PROCESS

The title of the discipline (module), practice in accordance	The title of special rooms and rooms for self-work	Equipment of special rooms and rooms for self-work
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with the curriculum		
Dietetics	340 (196084, St. Petersburg, Chernigovskaya str., 5) Classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification	<i>Specialized furniture:</i> desks, chairs <i>Technical training tools:</i> video projector, slide presentations on the parts of the discipline <i>Visual aids and educational materials:</i> posters with a list of food products for dogs and cats on dietary feeding.
	342 (196084, St. Petersburg, Chernigovskaya str., 5) Classroom for lecture-type classes, seminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification	<i>Specialized furniture:</i> desks, chairs <i>Technical training tools:</i> video projector, slide presentations on the parts of the discipline <i>Visual aids and educational materials:</i> posters with a list of food products for dogs and cats on dietary feeding.
	206 Large reading room (196084, St. Petersburg, Chernigovskaya str., 5) Room for self-work	<i>Specialized furniture:</i> tables, chairs <i>Technical means of education:</i> computers connected to the Internet and access to an electronic information and educational environment
	214 Small reading room (196084, St. Petersburg, Chernigovskaya str., 5) Room for self-work	<i>Specialized furniture:</i> tables, chairs <i>Technical means of education:</i> computers connected to the Internet and access to an electronic information and educational environment
	324 Information Technology Department (196084, St. Petersburg, Chernigovskaya str., 5) Room for storage and preventive maintenance of educational equipment	<i>Specialized furniture:</i> tables, chairs, special equipment, materials and spare parts for preventive maintenance of technical training facilities
	Box No. 3 Carpentry workshop (196084, St. Petersburg, Chernigovskaya str., 5) Room for storage and preventive maintenance of educational equipment	<i>Specialized furniture:</i> tables, chairs, special equipment, materials and spare parts for preventive maintenance of technical training facilities

Developers:

Head of the Department of Animal Feeding and Breeding,
Candidate of Veterinary Medicine, Associate Professor



Suyazova I.V.

Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution
of higher education
"Saint Petersburg State University of Veterinary Medicine"

Department of Animal Feeding and Breeding

FUND OF ASSESMENT TOOLS
for the discipline
"DIETETICS"

Level of higher education
SPECIALIST COURSE

Specialty 36.05.01 Veterinary Medicine
Profile: «General clinical veterinary medicine»
Full-time education

Education starts in 2025

Saint Petersburg
2025

1. PASSPORT OF THE FUND OF ASSESMENT TOOLS

№	Acquired competence	Assessed modules of a discipline	Assesment tool
1.	PC-9 ID-1	The concept of nutrition. The theoretical foundations of feeding a sick and healthy animal.	Survey, test
2.	PC-9 ID-1	Feeding dogs and cats in diseases and special physiological conditions.	Survey, report, test

List of assessment tools

№	Name of the assessment tool	Brief description of the assesment tool	Presentation of the assessment tool in the fund
1.	Survey	A means of controlling the assimilation of educational material of a topic, section or sections of a discipline, organized as an educational activity in the form of an interview between a teacher and students	Questions on topics / sections of the discipline
2.	Test	A system of standardized tasks, which allows to automate the assessment of students knowledge and skills	A fund of test assignments
3.	Report	A product of a student's self work, which is presented as a public speech presenting the results of doing a research on a specific educational, practical, educational or scientific topic. May be done in PowerPoint presentation format	Topics of reports

2. INDICATORS AND CRITERIA FOR ASSESSING COMPETENCIES AT VARIOUS STAGES OF ITS FORMATION, DESCRIPTION OF ASSESSMENT SCALES

Planned results of competency acquired	The level of development				Assesment tool
	Unsatisfactory	Satisfactory	Good	Exellent	
PC-9 – Development of recommendations for special feeding of sick animals for therapeutic purposes					
PC-9 ID-1 To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.	The level of knowledge is below the minimum requirements, gross errors have occurred	The minimum acceptable level of knowledge, many minor errors have been made	The level of knowledge corresponds to the training program, several minor errors have been made	The level of knowledge corresponds to the training program, no errors have been made	Survey, report, test

3. A LIST OF CONTROL TASKS AND OTHER MATERIALS, NECESSARY FOR THE ASSESSMENT OF KNOWLEDGE, SKILLS AND WORK EXPERIENCE

3.1. Typical tasks for the current control of academic progress

3.1.1. Survey questions

Questions for competence assessment PC-9 ID-1 To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.

According to the section "**The concept of dietetics. Theoretical foundations of feeding a sick and healthy animal**":

1. Specify the needs of dogs in nutrients and biologically active substances.
2. Specify the needs of cats in nutrients and biologically active substances.
3. Indicate what influences the norm of dogs' need for nutrients and biologically active substances?
4. Indicate what influences the norm of cats' need for nutrients and biologically active substances?
5. List the main sources of energy in the diet of dogs. What is the reason for the use of these feed products?
6. List the main sources of energy in the diet of cats. What is the reason for the use of these feed products?
7. Which feed products are sources of protein in the diets of dogs?
8. Which feed products are sources of carbohydrates in the diets of dogs?
9. Which feed products are sources of fats in the diets of dogs?
10. Which feed products are sources of protein in the diets of cats?
11. Which feed products are sources of carbohydrates in the diets of cats?
12. Which feed products are sources of fats in the diets of cats?
13. Specify the value of fat-soluble and water-soluble vitamins in dog feeding, sources of vitamins in the diet.
14. Specify the value of fat-soluble and water-soluble vitamins in cat feeding, sources of vitamins in the diet.
15. List the industrial dog food that is used in dietary feeding.
16. List the industrial cat food that is used in dietary feeding.

According to the section "**Feeding dogs and cats with diseases and special physiological conditions**":

1. The importance of natural food nutrients in the prevention and treatment of various diseases in dogs.
2. The importance of natural feed nutrients in the prevention and treatment of various diseases in cats.
3. With the help of which industrial additives it is possible to balance the diet of dogs according to vitamin substances.
4. With the help of which industrial additives it is possible to balance the diet of cats according to vitamin substances.
5. Features of feeding puppies and kittens.

According to the section "**The concept of dietetics. Theoretical foundations of feeding a sick and healthy animal**":

1. Specify the main features of feeding dogs with oxalate urolithiasis.
2. Specify the main features of feeding cats with oxalate urolithiasis.
3. Specify the main features of feeding dogs with struvite urolithiasis.
4. Specify the main features of feeding cats with struvite urolithiasis.

5. Peculiarities of feeding in case of liver pathologies in dogs.
6. Feeding features in case of liver pathologies in cats.
7. Feeding dogs with pathology of the gastrointestinal tract.
8. Explain which nutrient deficiency most often leads to the development of skin diseases in dogs?
9. Explain which nutrient deficiency most often leads to the development of skin diseases in cats

According to the section "**Feeding dogs and cats with diseases and special physiological conditions**":

1. Name the industrial-type feed for oxalate urolithiasis in dogs.
2. Name the industrial-type feed for oxalate urolithiasis in cats.
3. Features of feeding with urolithiasis of dogs, name the industrial brands of feed for this pathology.
4. Features of feeding with oxalate urolithiasis of cats, name the industrial brands of feed for this pathology.
5. Features of feeding with struvite urolithiasis of cats, name the industrial brands of feed for this pathology.
6. Which kidney stones are more common in cats – struvite or calcium oxalate and why?
7. Give a description of the industrial feeds of well-known manufacturers for liver pathologies in dogs.
8. Give a description of the industrial feeds of well-known manufacturers for liver pathologies in cats.
9. Name the industrial brands of feed for the pathology of the gastrointestinal tract in dogs.
10. Give a description of the industrial feeds of well-known manufacturers used in the pathology of the gastrointestinal tract in cats.
11. Which protein source is best suited for cats with increased food sensitivity?

3.1.2. Topics of the reports

Topics of reports for competence assessment PC-9 ID-1 To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.

1. Features of the eating behavior of dogs
2. Features of cats' eating behavior
3. Diet therapy for diseases of the oral cavity
4. Diet therapy for diseases of the esophagus
5. Diet therapy for acute gastritis
6. Diet therapy for chronic gastritis
7. Diet therapy for stomach ulcers
8. Diet therapy for small intestine disease
9. Diet therapy for colon disease
10. Diet therapy for liver disease
11. Diet therapy for pancreatic disease
12. Diet therapy for constipation and diarrhea
13. Diet therapy for skin diseases
14. Diet therapy for nephritis
15. Diet therapy for chronic renal failure
16. Diet therapy for urolithiasis caused by struvites
17. Diet therapy for urolithiasis caused by oxalates
18. Diet therapy for urolithiasis caused by purines
19. Diet therapy for heart diseases
20. Diet therapy for diabetes mellitus

21. Diet therapy for obesity
22. Diet therapy for bone and joint diseases
23. Diet therapy for food intolerance
24. Diet therapy for diseases of young animals caused by feed during weaning
25. Features of diet therapy of old animals

3.2. Standard tasks for intermediate certification

3.2.1. Questions for the test

The competence being formed PC-9 – Development of recommendations for special feeding of sick animals for therapeutic purposes

PC-9 ID-1 - To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.

According to the section "**The concept of diet therapy. Theoretical foundations of feeding a sick and healthy animal**":

1. What is dietary feeding?
2. What is therapeutic feeding?
3. What determines the norm of dogs' need for nutrients and biologically active substances?
4. What determines the norm of cats' need for nutrients and biologically active substances?
5. What are the main sources of energy in the diet of cats, what is the reason for this.
6. Name the main sources of energy in the diet of dogs, what is the reason for this.
7. How does the caloric content of the diet change, without changing the component composition.
8. Name the main sources of protein, carbohydrates and fats in the diets of dogs.
9. Name the main sources of protein, carbohydrates and fats in the diets of dogs
10. The biological value of proteins of plant and animal origin, ways to prepare them for feeding and the degree of digestibility.
11. Metabolism and consumption of carbohydrates.
12. Metabolism and consumption of proteins.
13. Metabolism and fat consumption.
14. Basic requirements when switching from one feed to another.

According to the section "**Feeding dogs and cats in diseases and special physiological conditions**".

1. With the help of which organic and industrial additives it is possible to balance the diet of dogs in terms of minerals.
2. With the help of which organic and industrial additives it is possible to balance the diet of cats in terms of minerals.
3. The importance of fat-soluble and water-soluble vitamins in dog feeding, sources of vitamins in the diet.
4. The importance of fat-soluble and water-soluble vitamins in dog feeding, sources of vitamins in the diet.
5. With the help of which industrial additives it is possible to balance the diet of dogs according to vitamin substances.
6. With the help of which industrial additives it is possible to balance the diet of cats according to vitamin substances.
7. Features of feeding puppies and kittens.

According to the section "**The concept of dietetics. Theoretical foundations of feeding a sick and healthy animal**":

1. Features of feeding with oxalate urolithiasis of dogs, name the industrial brands of feed for this pathology.

2. Features of feeding with struvite urolithiasis of dogs, name the industrial brands of feed for this pathology.
3. Features of feeding with oxalate urolithiasis of cats, name the industrial brands of feed for this pathology.
4. Features of feeding with struvite urolithiasis of cats, name the industrial brands of feed for this pathology.
5. Which kidney stones are more common in cats – struvite or calcium oxalate and why?
6. Name the techniques that help increase water consumption by animals with urolithiasis.

According to the section "**Feeding dogs and cats in diseases and special physiological conditions**".

1. Formula for determining energy requirements for animals weighing up to 2 kg.
2. Formula for determining energy requirements for animals weighing more than 2 kg.
3. Features of feeding in case of liver pathologies of dogs, name the industrial brands of feed for this pathology.
4. Features of feeding in case of liver pathologies of cats, name the industrial brands of feed for this pathology.
5. Feeding dogs with pathology of the gastrointestinal tract, name the industrial brands of feed for this pathology.
6. Feeding cats with pathology of the gastrointestinal tract, name the industrial brands of feed for this pathology.
7. The taste appeal of feed.
8. Deficiency of which nutrients most often leads to the development of skin diseases in cats?
9. Which protein source is best suited for cats with increased food sensitivity?
10. The physiological role of taurine, the consequences of taurine deficiency in cats.

3.2.2. Tests

The competence being formed PC-9 – Development of recommendations for special feeding of sick animals for therapeutic purposes

PC-9 ID-1 - To know the types of dietary regimes, the principles of feed choice, using digital technologies, norms, feeding regimes in animal diet therapy.

Cats and dogs do not chew food because

- A there is no time
- B is not required due to the consistency of the feed
- C the shape of the teeth does not allow this to be done

Dogs and cats have stomachs

- A glandular
- B the ironless
- C mixed

The stomach can stretch a lot

- A the dog
- B the cat
- C both the dog and the cat

Carbohydrates in cats and dogs are digested in

- A the oral cavity
- B the stomach
- C a small intestine

D colon

The proteins of the feed are digested in

- A the oral cavity
- B the stomach
- C small intestine
- D colon

The digestion of feed fats occurs in

- A the oral cavity
- B the stomach
- C a small intestine
- D colon

Low amylase activity is noted in

- A the cats
- B dogs
- C cats and dogs

The pH of gastric juice in dogs

- A 1-2
- B 3-4
- C 1-4

Lysozyme is

- A the enzyme
- B the hormone
- C amino acid
- D Antiseptic

The juice of the pancreas contains

- A the slime
- B enzymes
- C bile

In the oral cavity feed

- A it is crushed
- B It is digested
- C the transit

In cats, the relative length of the intestine (relative to the length of the body) is shorter than in dogs

- A That's Right
- B Incorrectly

A small dogs, the relative length of the intestine (relative to the length of the body) is less than in dogs of large breeds

- A That's Right
- B Incorrect

The cat has high amylase activity

- A That's Right

B Incorrect

An amino acid is needed for the synthesis of wool pigment

- A phenylalanine
- B arginine
- C taurine
- D Leucine

Long-haired dogs and cats need

- A methionine
- B lysine
- C arginine

A lack of protein in the diet will lead to

- A to reduce body weight
- B will not affect the animal in any way
- C to gain weight
- D to reduce the digestibility of feed

The cat does not synthesize fatty acid in the body

- A the linoleum
- B linolenic
- C arachidonic acid

The need for fats is higher in

- A the cats
- B dogs
- C the same needs for both cats and dogs

The need for carbohydrates is greater in

- A the dogs
- B cats
- C dogs and cats have the same need

What function do carbohydrates not perform in the body?

- A the protective one
- B the energy industry
- C the transport

When calculating the energy needs of a lactating female, it is taken into account

- A the mass of the female
- B the number of kittens (puppies)
- C the lactation period
- D age
- E planned amount of milk produced

The amount of energy contained in the feed is called

- A gross energy
- B digestible energy
- C exchange energy

The energy needs of an animal are determined by

- A gross energy
- B the exchange of energy
- C digestible energy

The energy value of the main nutrients is expressed in

- A the Atwater coefficient
- B the coefficient of digestibility
- C exchangeable energy

To determine the energy needs of the female, take into account

- A the number of kittens \ puppies
- B the mass of the female
- C the age of kittens \ puppies
- D breed

The energy in the diet is provided by

- A proteins
- B fats
- C carbohydrates
- D water
- E vitamins
- F minerals

The energy requirement per kilogram of live weight will be higher for

- A Pekingese
- B Labrador
- C Spaniel

What amino acid is not synthesized in the body that cats need? taurine

How many kcal in 1 kJ? 4,18

The limiting amino acid is licin

- A That's Right
- B Incorrect

Heat treatment affects the taurine content in feed

- A That's Right
- B Incorrect

The need for protein in dogs is greater than in cats

- A That's Right
- B Incorrect

The need for protein in cats is greater than in dogs

- A That's Right
- B Incorrect

The Atwater coefficient expresses the energy value of the main nutrients of the feed

- A That's Right
- B Incorrect

The energy requirement does not depend on the age of the animal

- A That's Right
- B Incorrect

The need for energy does not depend on the conditions of detention

- A That's Right
- B Incorrect

A starvation diet is prescribed

- A for 1 day
- B for 2 days
- C 12 hours
- D for 3 days

During the period of a starvation diet to an animal

- A the food is excluded, the water is left
- B the water is excluded, the food is left
- C food and water excluded

The goal of a starvation diet

- A unloading of the gastrointestinal tract
- B to reduce the load on the cardiovascular system
- C to reduce the amount of food eaten per week

The Atwater coefficient is

- A coefficient showing the energy value of nutrients in the feed
- B the correction factor
- C coefficient of conversion of minerals in the diet

The foam on the surface of the broth is

- A denatured proteins
- B carbohydrates
- C oxidized fats

What helps to reduce extractive substances

- A Cooking in small pieces
- B A low boil
- C Draining the first broth
- D Cooking with a large piece
- E At a moderate boil
- F At high boiling

How can gastric juice secretion be stimulated?

- A the cottage of fiber
- B the broth cottage
- C the cottage of fatty food

What kind of gastrointestinal tract does not exist

- A the physical
- B the chemical
- C thermal
- D mechanical

Mechanical respect consists in

- A the thermal method of feed processing
- B the crushing of feed
- C exclusion of certain types of feed

During thermal cooling, the feed temperature should be

- A 37-40°C
- B 22-25°C
- C 50-53 °C

During chemical treatment is excluded

- A the broths
- B fatty food
- C bakery products
- D meat feeds

At what type of heat treatment is the minimum loss of nutrients

- A cooking
- B extinguishing
- C steam treatment

Extractive substances are removed from the products

- A with chemical treatment
- B case of thermal sparing
- C with mechanical sparing

How can the content of extractives in the feed be reduced?

- A by cooking
- C Steam treatment
- C freezing
- D cannot be reduced

Vitamin that breaks down during heat treatment

- A C
- B D
- C A
- D K

Which group of vitamins are not destroyed by heat treatment

- A Fat-soluble
- B Water-soluble
- C A, D, E, K

Mineral substances pass into a decoction during heat treatment

- A That's Right
- B Incorrect

Mineral substances do not pass into a decoction during heat treatment

- A That's Right
- B Incorrect

Chemical treatment reduces the secretion of the gastrointestinal glands

- A That's Right
- B Incorrect

What foods are excluded from the diet for diarrhea

- A rice
- B kefir
- C mackerel
- D jelly

Diet No. 1 is prescribed for the disease

- A the stomach
- B the kidneys
- C the liver
- D obesity

Feeding regimen for diet therapy of acute gastritis

- A 2-3 times a day
- B 2 times a day
- C 4-5 times a day

In case of constipation, the diet includes

- A kefir
- B fiber
- C rice
- D meat

For the prevention of which disease it is necessary to increase water consumption

- A urolithiasis
- B gastritis
- C hepatitis
- D enterocolitis

Phosphatbinders are used in pathology

- A the liver
- B the kidneys
- C the pancreas

Phosphatbinders are

- A supplement to reduce phosphates in the diet
- B supplement to increase phosphates in the diet
- C an additive to normalize mineral metabolism
- D a treat

In case of obesity, we limit

- A the amount of feed
- B the amount of energy in the feed
- C the amount of mineral substances

In case of obesity in the diet, we increase the content

- A fiber
- B mineral substances

C vitamins

When making up a diet for obesity, we calculate the amount of energy

- A for the live weight of the animal at the moment
- B for an ideal living mass
- C do not calculate the amount of energy, we just reduce the portion of feed

In case of obesity, cereals are not included in the diet

- A the semolina
- B the rice
- C pearl
- D corn

Diet therapy for obesity lasts

- A up to 5-6 months
- B 1-2 weeks
- C 1 month

Diet No. 5 is prescribed for the disease

- A the liver
- B the kidneys
- C gastritis
- D obesity

In case of chronic renal failure, the content of the diet is regulated

- A phosphorus
- B calcium
- C magnesium
- D selenium

The amount of protein in the diet is reduced in

- A case of kidney failure
- B obesity
- C liver disease

The diet for struvite type of urolithiasis is not curative, since it is impossible to dissolve stones of this type.

- A That's Right
- B Incorrect

When animals are obese, the amount of carbohydrates in the diet is reduced

- A That's Right
- B Incorrect

Diet therapy for obesity lasts 1 month

- A That's Right
- B Incorrect

In case of obesity, diet therapy is enough to reduce body weight

- A That's Right
- B Incorrect

The diet for enterocolitis diet therapy is physiologically defective

- A That's Right
- B Incorrect

An amino acid is needed to recycle ammonia

- A arginine
- B methionine
- C phenylalanine
- D taurine
- E leucine

Dogs and cats can become infected with helminths when eating

- A the meat
- B pisces
- C cereals
- D fermented dairy products
- E vegetables

Fiber is contained in

- A by-products
- B meat and fish products
- C in cereals
- D vegetables

The food is rich in easily digestible carbohydrates

- A rice
- B the brain
- C kefir
- D cabbage
- E chicken breast

The highest fat content in cereals

- A oatmeal
- B pearl
- C semolina
- D buckwheat
- E corn

Meat has a high content

- A phosphorus
- B calcium
- C potassium
- D magnesium
- E zinc

The liver is rich in vitamins

- A A
- B B12
- C C
- D D
- E K

The inclusion of the liver in the diet will make up for the lack of vitamins

- A A
- B D
- C H
- D folic acid

The liver can make up for a deficiency in the diet

- A the iron
- B calcium
- C phosphorus
- D magnesium
- E iodine

The humidity of industrial dry feeds should be

- A 8-12%
- B 4-6%
- C 14-18%

Ready-made industrial cat food is not fed to dogs, because there is

- A another need for energy
- B another need for protein
- C another need for fats
- D another need for minerals
- E all of the above is suitable

When preparing a diet, take into account

- A the gross energy of the product
- B the exchange energy of the product

Taurine is contained in

- A the meat
- B the fish
- C cereals
- D vegetable oil

The feed is rich in calcium

- A the cottage cheese
- B meat and bone meal
- C cereals
- D meat

A dog is a predator, so its diet should consist only of animal feed

- A That's Right
- B Incorrect

Meat has a high calcium content

- A That's Right
- B Incorrect

Ready-made dry industrial feed has a higher energy nutritional value than wet ones

- A That's Right
- B Incorrect

4. METHODOLOGICAL MATERIALS DEFINING THE PROCEDURES FOR ASSESSING KNOWLEDGE, SKILLS AND ABILITIES AND WORK EXPERIENCE CHARACTERIZING THE STAGES OF COMPETENCE FORMATION

Criteria for evaluating students' knowledge during the knowledge survey

Mark "**excellent**" - the student clearly expresses his point of view on the issues under consideration, giving appropriate examples.

Mark "**good**" - the student admits some errors in the answer

The mark «**satisfactory**» - the student discovers gaps in knowledge of the basic educational and normative material.

The mark "**unsatisfactory**" - the student discovers significant gaps in knowledge of the basic provisions of the discipline, the inability to obtain the correct solution to a specific practical problem with the help of a teacher.

Criteria for evaluating students' knowledge when checking reports:

- Mark "**excellent**" - the problem is identified and its relevance is justified; an analysis of various points of view on the problem under consideration is made and one's own position is logically stated; conclusions are formulated, the topic is fully disclosed, the volume is maintained; the requirements for external design are met, the basic requirements for the report are fulfilled.

- Mark "**good**" - mistakes have been made. In particular, there are inaccuracies in the presentation of the material; there is no logical consistency in judgments; the volume of the abstract is not maintained; there are omissions in the design, there are significant deviations from the requirements for the report.

- Mark "**satisfactory**" - the topic is only partially covered; factual errors were made in the content of the report; there are no conclusions, the topic of the report is not disclosed.

- Mark "**unsatisfactory**" - there is a significant misunderstanding of the problem or the report is not presented at all.

Criteria for evaluating students' knowledge during testing

- Mark "**excellent**" - the student answered 90-100% correctly.

- Mark "**good**" - the student answered 75-89% correctly.

- Mark "**satisfactory**" - the student answered 60-74% correctly.

- Mark "**unsatisfactory**" - the student answered correctly by 59% or less.

- The grade "**credited**" must correspond to the parameters of any of the positive grades ("excellent", "good", "satisfactory").

- The grade "**not credited**" must correspond to the parameters of the grade "unsatisfactory".

Criteria of knowledge during the credits

- The grade "**credited**" must correspond to the parameters of any of the positive grades ("excellent", "good", "satisfactory").

- The grade "**not credited**" must correspond to the parameters of the grade "unsatisfactory".

- Mark "**excellent**" – all types of educational work provided for in the curriculum have been completed. The student demonstrates the compliance of knowledge, skills, and abilities with the indicators given in the tables, operates with acquired knowledge, skills, and applies them in situations of increased complexity. At the same time, inaccuracies, difficulties in analytical operations, transfer of knowledge and skills to new, non-standard situations may be allowed.

- Mark "**good**" – all types of educational work provided for in the curriculum have been completed. The student demonstrates the compliance of knowledge, skills, and abilities with the indicators given in the tables, operates with acquired knowledge, skills, and applies them in standard situations. At the same time, minor errors, inaccuracies, difficulties in analytical operations, transfer of knowledge and skills to new, non-standard situations may be made.

- Mark **"satisfactory"** – one or more types of educational work provided for in the curriculum have not been completed. The student demonstrates incomplete compliance of knowledge, skills, and abilities with the indicators given in the tables, significant errors are made, a partial lack of knowledge, skills, and skills is manifested in a number of indicators, the student experiences significant difficulties in operating with knowledge and skills when transferring them to new situations. –

- Mark **"unsatisfactory"** – the types of educational work provided for in the curriculum have not been completed. demonstrates incomplete compliance of knowledge, skills, and abilities given in the tables of indicators, significant errors are made, a lack of knowledge, skills, and skills is manifested for a large number of indicators, the student experiences significant difficulties in operating with knowledge and skills when transferring them to new situations.

5. ACCESSIBILITY AND QUALITY OF EDUCATION FOR DISABLED PEOPLE

If necessary, persons with disabilities and persons with disabilities are given additional, time to prepare an answer for the test.

When conducting the procedure for evaluating the learning outcomes of disabled people and persons with disabilities, their own technical means can be used.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities in the discipline provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For people with visual impairments:	– in printed form in enlarged font; – in the form of an electronic document.
For people with hearing impairments:	– in printed form; – in the form of an electronic document.
For people with disorders of the musculoskeletal system:	– in printed form, the device; – in the form of an electronic document.

When conducting the procedure for evaluating the learning outcomes of disabled people and persons with disabilities in the discipline, it ensures that the following additional requirements are met, depending on the individual characteristics of the students:

a) instructions on the procedure for conducting the assessment procedure are provided in an accessible form (orally, in writing);

b) an accessible form of assignment of assessment tools (in printed form, in printed form in enlarged font, in the form of an electronic document, assignments are read out by the teacher);

c) an accessible form of providing answers to tasks (written on paper, a set of answers on a computer, orally).

If necessary, for students with disabilities and the disabled, the procedure for evaluating the results of training in the discipline can be carried out in several stages.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities is allowed using distant learning technologies.