

NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES  
OF UKRAINE

Faculty of Veterinary Medicine

Department of Veterinary Hygiene named after Professor A.K. Skorokhodko

"APPROVED"  
Dean of the Faculty of Veterinary Medicine,  
Professor Mykola TSVILICHOVSKY



"APPROVED"  
at the meeting of the Department of Veterinary Hygiene  
named after Professor A.K. Skorokhodko  
Protocol No 9 of April 11, 2023  
Head of department *Mariia KUCHERUK* Mariia KUCHERUK

"REVIEWED"  
Guarantor of EP "Veterinary medicine"  
*Nataliia HRUSHANSKA* Nataliia HRUSHANSKA

WORKING PROGRAM OF THE DISCIPLINE

**State Veterinary and Sanitary Expertise**

Specialty 211 – "Veterinary Medicine"

educational program "Veterinary Medicine"

Faculty of Veterinary Medicine

Developers: PhD in biol sciences, Associate prof. M.A. Galaburda  
(position, scientific degree, academic rank)

Kyiv – 2023p.

**1. Description of the discipline**  
State Veterinary and Sanitary Expertise  
(subject)

<b>Field of knowledge, direction of training, specialty, educational qualification level</b>		
Field of knowledge	21 – "Veterinary Medicine" (name)	
Direction of preparation		
Speciality	211 "Veterinary Medicine" (name)	
Educational degree	Master	
Type	Core	
Total number of hours	120	
Number of ECTS credits	4,0	
Number of modules	2	
Course project (work) (if any)	-	
Form of control	<i>Final test</i>	
<b>Indicators of the discipline for full-time and part-time forms of education</b>		
	full-time education	part-time study
Year of preparation (course)	2023-2024	
Semester	1	
Lecture classes	<i>15 hours</i>	
Practical, seminar classes	<i>--hour.</i>	
Laboratory classes	<i>15 hours</i>	
Independent work	<i>90 hours</i>	
Individual tasks	<i>-- h.</i>	
Number of weekly classrooms hours for full-time study	<i>2 hours</i>	

## **2. The purpose and objectives of the discipline State Veterinary and Sanitary Expertise**

**The course goal** is to develop the legislation and organizational structure of the State Veterinary Service of Ukraine at the enterprises of the meat, dairy and fishing industries, at the border and transport, objects and methods of state veterinary control.

**The course objective** is to familiarize students with the veterinary legislation of Ukraine with the basics of deontology and jurisprudence in veterinary medicine, veterinary records management in the field of state veterinary supervision and control in order to guarantee the release of benign and safe products for the population and raw materials for industry; to exclude the likelihood of poisoning of people, animals with food products of animal origin; to prevent the distribution of animal products that have toxic, mutagenic, carcinogenic, allergenic or other adverse actions for the human body when consumed in generally accepted quantities, the limits of which are established by the Ministry of Health of Ukraine;

### ***Competence acquisition:***

#### ***integral competence (IC):***

the ability to solve complex tasks and problems in the field of veterinary medicine, which involves conducting research and/or implementing innovations and is characterized by the uncertainty of conditions and requirements.

#### ***general competences (GC):***

GC 3. knowledge and understanding of the subject field and profession.

#### ***professional (special) competences (SC):***

SC 15. Ability to organize supervision and control of production, storage, transportation and sale of products of animal and plant origin.

SC 19. Ability to carry out educational activities among industry workers and the population.

SC 20. Ability to organize, implement and control document flow during professional activity.

#### ***Program learning outcomes (PLU)***

PNR 9. Develop measures aimed at protecting the population from diseases common to animals and humans.

PLU 12. Know the rules and legislative regulations regarding the supervision and control of production, storage, transportation and sale of products of animal and plant origin.

PLU 14. To understand the essence of the processes of production, storage and processing of biological raw materials.

## 2. Program and structure of the discipline for:

– full term of full-time education;

<i>Names of content modules and themes</i>	<i>Number of hours</i>						
	<i>Week</i>	<i>Total</i>	<i>including</i>				
			<i>lect</i>	<i>pract</i>	<i>lab</i>	<i>Ind</i>	<i>s.w.</i>
1	2	3	4	5	6	7	8
<b>Content module 1. Determination of the subject. State veterinary and sanitary expertise in the transportation and processing of animals, food and feed of animal origin.</b>							
Topic 1. The importance of State veterinary and sanitary expertise for obtaining high-quality and safe food and feed.	1	5	1				10
Topic 2. Theoretical backgrounds of approaches to food and feed safety control.	1	9	1		2		10
Topic 3. Approaches of regulation of food safety control in Ukraine and harmonization with EU requirements. General provisions of the legislation on food products	2-3	14	2		2		10
Topic 4. The basic principles of ensuring food safety and non-hazardous factors are related to food.	4-5	13	2		2		10
Topic 5. Goals, methods and tools for modern food safety control. Application of European approaches	6-7	12	1		2		10
Topic 6. International impact on food legislation. Ways to strengthen the national food control system (systemic, organizational and individual level)	8-9	14	2		2		10
Total content module 1		79	9		10		60

<b>Content module 2. State control of food market operators</b>							
Topic 1. Risk analysis in the food chain. (Microbiological and chemical hazards)	10-12	14	2		2		10
Topic 2. Organization of state control.	12-14	14	2		2		10
Topic 3. Organic food production (general requirements, principles, certification and audit)	13-15	13	2		1		10
Total by content module 2		41	6		5		30
Total hours		120	15		15		

### **3. Topics of lecture classes**

<b>№</b>	<b>Theme Title</b>	<b>Hours</b>
1	Introduction. The importance of State veterinary and sanitary examination for obtaining high-quality and safe products.	1
2	Theoretical backgrounds of approaches to food and feed safety control. Evolution of government programs and projects regulating food safety control.	1
3	Approaches to regulating food safety control in Ukraine, harmonization with EU requirements.	2
4	The basic principles of ensuring food safety and hazards related to food.	2
5	Goals, methods and tools for modern food safety control.	1
6	International impact on food legislation. Ways to strengthen the national food control system (systemic, organizational and individual level)	2
7	Risk analysis in the food chain. (microbiological and chemical hazards).	2
8	Organization of state control. Main components for the organization of the system of state control.	2

	Organic food production (general requirements, principles, certification and audit)	2
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#### **4. Topics of practical (laboratory) classes**

№	Theme Title	Hours
1	General provisions of the legislation on food products	2
2	Safety systems as a means of monitoring food safety in the EU agri-food chain (HACCP principles, HACCP implementation and audit)	2
3	Capacity control measures. Inspection and audit.	2
4	Control of foreign substances in feed and pollutants in food products.	2
5	Application of the principles of state control to specific types of production (production and processing of milk, meat, eggs, feed)	4
6	Problems of the state control system in Ukraine	2
7	Presentation of students' research topics.	1

#### **5. Topics of classes for independent work**

№	Theme Title	Hours
1	Sanitary and hygienic and technological requirements for production workshops of slaughter and meat processing enterprises	10
2	Requirements for the transportation of slaughter animals	10
3	Modern technological schemes for the slaughter of productive animals	10
4	Organization of workplaces and methods of vetsanexpertiza of slaughter products in a meat processing plant	10
5	Chemical and morphological composition of meat of productive animals	10

6	Veterinary and sanitary control of meat in contagious diseases of animals	10
7	Methods of veterinary and sanitary examination of milk and cheeses	10
8	Veterinary and sanitary control and examination of fish	10
9	Veterinary and sanitary examination of plant products	10

**6. Control questions, test kits to determine the level of knowledge acquisition by students**

<b>1</b>	<b>The main task of transportation is to</b>
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<b>2</b>	<b>The temperature of drinking water should be _____°C</b>		
<b>a</b>	Not lower than 4 and not higher than 25	<b>c</b>	Not lower than 15 and not higher than 35
<b>b</b>	Not lower than 10 and not higher than 15	<b>d</b>	Not lower than 8 and not higher than 20

<b>3</b>	<b>The walls of production facilities are lined with glazed tiles to a height of at least _____m.</b>
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<b>4</b>	<b>How much of the living weight is blood in cattle</b>
1.	5-7
2.	7-8
3.	9-10
4.	10-15

<b>5</b>	<b>Cattle edging begins with:</b>
1.	Sawing pubic accretion
2.	Removal of the rectum

3.	Sawing of the chest bone
4.	Remove livery

<b>6</b>	<b>Preparation of the head of single-hoofed for veterinary examination includes:</b>
1.	Tongue trimming
2.	Cutting down the nasal septa
3.	Separation of the head from the carcasses
4.	1-3

<b>7</b>	<b>Destruction of slaughter products involves:</b>
1.	defusing carcasses or corpses in biothermal pits without further use
2.	defusing carcasses or corpses by burning without further use
3.	disposal of carcasses or corpses by burning with subsequent use for the manufacture of animal feed and technical products

<b>8</b>	<b>Disinfection of withdrawals is carried out:</b>
1.	in vertical vacuum boilers
2.	in horizontal vacuum boilers
3.	biothermal method
4.	chlorination

<b>9</b>	<b>What determines the structure and staff of the veterinary control of meat processing enterprise?</b>
1	from the administrative subordination of the enterprise
2	from the power and volume of products produced
3	from the financial capabilities of the enterprise
4	from the statutes of the enterprise



<b>10</b>	<b>The department of production veterinary control of the meat mill has.....units</b>
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<b>11</b>	<b>What is the frequency of inspection of frozen meat with vetpersonal when storing it in an industrial refrigerator?</b>
1	Once per month
2	Once per decade
3	2 times a year
4	Once per quarter

<b>12</b>	<b>At meat processing plants during the processing of cattle, the following points (places) of vetsanexpertiza are equipped:</b>
1	heads, internal organs, mascara, final
2	internal organs, mascara, final
3	mandibular lymph nodes, heads, internal organs, carcasses, final
4	Mandibular lymph nodes, heads, internal organs, carcasses, final
5	heads, mascara, final

<b>13 A. Destruction of waste is:</b>	Implementation of any technological operations related to the change in the physical, chemical or biological properties of waste for the purpose of their further use
B. reduction or elimination of waste hazards through mechanical, physico-chemical or biological treatment	
The use of waste as secondary material or energy resources	D. change in the physicochemical state of waste under the influence of high temperatures, chemicals, biological decay processes

<b>14</b>	<b>The third point of vetsanexpertiza horses is.....</b>
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<b>15</b>	<b>To work at the meat processing enterprise, the official veterinarian of vetmedicine should:</b>
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1	have work experience in the specialty of at least 5 years
2	have work experience in the specialty of at least 3 years
3	have work experience in the specialty of at least 1 year
4	experience is not necessary

<b>16</b>	<b>Fish and seafood are allowed to be imported into the Ukraine, if they leave enterprises located on administrative territories free of African swine fever during:..... Years</b>
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<b>17</b>	<b>Milk for subclinical mastitis from affected quarters:</b>
1	used without restrictions;
2	after boiling destroyed;
3	after pasteurization sent to the dairy plant;
4	after heat treatment is used for animal feed

<b>18</b>	<b>A.Meat meal is:</b>	G.feed product produced from meat waste of animals with the addition of 45% of bones
	B.product, which obtained from non-food waste, confiscations, corpses and other animal waste. origin, which are allowed for processing	
	In the feed product produced from soft waste animals with the addition of 10% of the bones	D.feed product produced from bones, bone semi-finished product and residue

<b>19</b>	<b>How many days after vaccination with the anthrax vaccine can slaughter animals be transported?</b>
1	after 10 days
2	after 12 days
3	after 14 days
4	after 7 days

<b>20</b>	<b>Veterinary certificates on the state of animal health have the right to write:</b>
1	doctors of veterinary medicine of state institutions
2	doctors of veterinary medicine of state institutions and veterinarians working under licenses and having permission for this type of activity
3	doctors working under licenses

<b>21</b>	<b>Quarantine department should accommodate .... % of animals from their daily intake at the meat processing plant:</b>
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<b>22</b>	<b>In what cases is the half-patrol of the bird carried out?</b>
1	at the direction of the administration
2	in the absence of an infect. diseases of poultry in the enterprise
3	in the absence of parasitic. diseases of poultry in the enterprise
4	by the decision of the district department of vetmeditsyn

<b>23</b>	<b>What is a state vet. Supervision?</b>
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<b>24</b>	<b>What are the requirements for containers when importing fish and seafood from abroad into Ukraine?</b>
1	Tara must be clean
2	Tara should be whole
3	Containers should be used for the first time
4	containers must meet the sanitary and hygienic requirements of the exporting country

<b>25</b>	<b>What veterinary accompanying document should be when importing milk and dairy products into Ukraine?</b>
1	vet identity
2	vetsertificate

3	vetdovidka
4	high-quality certificate

<b>26</b>	<b>In salmonellosis milk:</b>
1	disinfect pasteurization at 85 <sup>0</sup> C – 30 minutes or boiled;
2	disinfected with pasteurization at 72 <sup>0</sup> C – 30 min.;
3	disinfected with boiling for 1 hour;
4	disinfected with pasteurization at 95 <sup>0</sup> C – 30 min

<b>27</b> A. According to GOST salmon caviar (red) is divided into grades	B. higher, first, second
According to GOST, sturgeon caviar (black) is divided into grades	D. first. second

<b>28</b>	<b>The second point of vetsanexpertiza DRH is an overview.....</b>
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<b>29</b>	<b>When meat enters industrial refrigerators, it should have</b>
1	vet certificate, vet stamp prints
2	high-quality certificate, certificate of conformity
3	accompanying documents are not required
4	consignment note

<b>30</b>	<b>Who belongs to the 1st division of the VVK of the meat processing enterprise?</b>
1	technologists-controllers
2	specialists of the production laboratory
3	veterinary specialists of the enterprise
4	administration of the enterprise

## **8. Teaching methods.**

The organization of training at NUBiP of Ukraine is provided by means of combining classroom and extracurricular forms of education, namely: - lectures;

- practical classes (laboratory work, laboratory workshop); - independent classroom work of students;
- independent extracurricular work of students;
- consultations;

To control the quality of knowledge and skills of students are used: - individual interviews;

- colloquiums;
- scoring.

During the study of the discipline "State Veterinary and Sanitary Expertise", the following teaching methods are used:

- lectures;
- laboratory classes;
- independent classroom work of students;
- independent extracurricular work of students.

## **9. Forms of control.**

Control and evaluation of students' educational achievements is an important component of the educational process in a higher educational institution. Control in the didactics of higher school should be understood as pedagogical support, observation and verification of the success of educational and cognitive activities of students.

The control process carried out by the teacher involves several stages: 1) verification (identification of the level of knowledge, skills and abilities acquired by students);

2) assessment (measuring the level of knowledge, skills and abilities and comparing them with certain standards outlined by the requirements of the curriculum);

3) accounting (fixation of results in the form of grades, scores, ratings in the journal, scoring book, scoring or examination information).

Controlling the educational and cognitive activities of students, the teacher directs his efforts to solving the following tasks:

- identification of the quality of assimilation of educational material, the degree of compliance of the acquired skills and abilities with the goals and objectives of the discipline;

- identification of difficulties in students' assimilation of educational information and typical errors in order to correct and eliminate them; - determination of the effectiveness of organizational forms, methods and means of training;

- diagnosis of the level of readiness of students to perceive new material.

Pedagogical control performs the following functions:

- educational (educational), which consists in ensuring that control measures contribute to the deepening, expansion, improvement and systematization of students' knowledge, skills and abilities, provide feedback in learning;

- diagnostic and corrective, aimed at determining the level of knowledge,

skills and abilities, as well as typical mistakes, gaps and difficulties in learning, the reasons for failure and ensuring measures to eliminate them;

- evaluation, which consists in finding out the state of knowledge, skills and abilities of both individual students and the academic group as a whole, and also ensures the accounting and openness of control results, which contributes to objective assessment and better learning;

- stimulating, which implies the approval of the success achieved by students and the formation of a positive motivation for learning, systematic educational and cognitive activity, the development of a sense of responsibility for its effectiveness;

- developmental, which consists in the fact that under conditions of systematic, pedagogical expedient control, memory, attention, thinking, oral and written speech, abilities, cognitive interests, activity and independence of students develop;

- educational, aimed at the formation of discipline, organization, self-discipline skills, a positive attitude to learning, the formation of the need for constant self-education and self-improvement;

- predictive and methodological, which concerns both the teacher (who receives fairly accurate information on the effectiveness of his activities) and students, since the choice of the optimal teaching methodology, improvement of teaching methods, can significantly affect the final result – the quality of professional training of a university graduate.

The following types of control are used: preliminary, current, thematic, final. Preliminary control is carried out in order to identify the level of preparedness of the student for the perception of new material. Such a check can be carried out in the form of test tasks, written control robots, frontal oral survey in practical classes, individual or group consultations.

Thematic knowledge test is aimed at determining the level of assimilation by students of a particular topic or several interrelated topics (modules). One of the main tasks of thematic verification is to create prerequisites for understanding and generalizing sufficiently large amount of educational information. For thematic control, which can be carried out at the final seminar, colloquium or in the process of modular or thematic control work, tasks are selected and constructed in such a way as to eliminate the elements of chance and objectively evaluate the educational achievements of students in all sections of the topic.

The final control is aimed at checking the level of assimilation of knowledge, practical skills and skills of students for a long period of time of study semester, for the entire period of study at the university. The purpose of the final control of knowledge is to identify the structure and system of knowledge of students. The components of such control are semester control and state certification. The student is allowed to the final control, provided that he performs all types of work provided for by the curriculum for a semester in this discipline.

Scoring - special means of final verification and evaluation of academic achievements of students.

Semester standings are a form of final control in a separate academic discipline for a semester, aimed at checking the assimilation of theoretical and practical material.

The tests are made according to the examination tickets approved by the

department. The teacher necessarily acquaints students with the content of examination questions.

To control the quality of knowledge and skills of students in the discipline "State Veterinary and Sanitary Expertise", the following control methods are used: - modular test tasks;

- individual tasks;
- individual interviews;
- colloquiums;
- scoring.

**10. Distribution of points that students receive.** The assessment of the student takes place in accordance with the provisions of the "On examinations and tests at NUBiP of Ukraine" dated 27.02.2019 No. 7

**The relationship between national assessments and the rating of a higher education applicant**

Student rating, points	Assessment of national for assembly	
	Examinations differentiated tests	tests
90 - 100	Perfectly	Credited
74 - 89	Well	
60 - 73	Satisfactory	
00 - 59	Disappointing	Not counted

To determine the rating of the student (listener) in the assimilation of the discipline  $R_{DIS}$  (up to 100 points), the received rating for certification (up to 30 points) is added to the rating of the student (listener) in the educational work  $R_{ew}$  (up to 70 points):  $R_{DIS} = R_{ew} + R_{fte}$ .

**11. Methodological support**

O.M. Yakubchak, A.I. Tyutyun, T.V. Taran, S.A. Tkachuk, A.I. Kobysh, R.I. Bilyk, N.A. Mezhenka State Veterinary and Sanitary Supervision and Control in processing of raw materials of animal origin / Methodical instructions for the study of the discipline "State Veterinary and Sanitary Expertise" for masters, postgraduates and students of the Institute of Postgraduate Education. Specialty 8.11010101 – "Veterinary Medicine", K., 2015, 29 p.

## **12. Recommended literature**

### **Basic literature**

1. Law of Ukraine "On Veterinary Medicine" dated 16.11.2006 No 361-V.
2. Law of Ukraine "On liability of enterprises, institutions and organizations for violation of the legislation on veterinary medicine" dated 05.12.1996 No 569/96-BP.
3. Law of Ukraine "On Food Safety and Quality" dated 06.09.2005 No2809-IV.
4. Instruction on the procedure for removal from sale (confiscation) of food, chemical and radioactive substances, biological materials, approved by the Order of the Ministry of Health of Ukraine dated April 14, 2095 No. 68 and registered with the Ministry of Justice of Ukraine on November 21, 2095 under No. 416/952.
5. Legislation of Ukraine on veterinary medicine / Edited by prof. Dostoevsky P.P. and prof. Khomenko V.I. - K.: "Harvest. - 1999.-590 cc
6. O.M. Yakubchak, V.I. Khomenko, S.D. Melnychuk, etc. Veterinary and sanitary expertise with the basics of technology and standardization of livestock products. - Kyiv, LLC." Bioprom". – 2005.- 799s.
7. O.M.Yakubchak, A.I.Tyutyun State Veterinary and Sanitary Expertise: [Textbook, second edition (supplemented)] / Uk. O.M.Yakubchak, A.I.Tyutyun. – K.:CPU "Comprint", 2017 –267 p.
8. Mandatory minimum list of studies of raw materials, products of animal and vegetable origin, feed raw materials, feed, vitamin preparations, etc., which should be carried out in state laboratories of veterinary medicine and according to the results of which a veterinary certificate (f-2) is issued, approved by the Order of the State Department of Veterinary Medicine of Ukraine dated 03.11.98 No. 16 and registered with the Ministry of Justice of Ukraine on November 30, 2018 under No. 761/3201 (as amended by the State Department of Veterinary Medicine dated 18.11.2003 No87 and registered with the Ministry of Justice of Ukraine on 28.04.2004 under No549/9148, as amended by the Order of the State Department of Veterinary Medicine of 27.09.2004 No. 107 and registered on 04.10.2004 under No. 1249/9848).
9. Veterinary requirements for imports into Ukraine objects of state veterinary and sanitary control and supervision, approved by the Order of the State Department of Veterinary Medicine of 16.06.2004 No. 71 and registered with the Ministry of Justice of Ukraine on 23.06.2004 under No. 768/9367.

### **Auxiliary literature**

1. Vlasenko V.V., Kravtsiv R.Y., Khomenko V.I., etc. Veterinary and sanitary examination of raw materials and products of animal origin. Edited by prof. Vlasenko V.V. – Vinnytsia.-1999.-509 p.
2. Makarov V.A., Frolov V.P., Shuklin N.F. Veterinary and sanitary expertise with the basics of technology and standardization of food tummy. Pod ed. V.A.Makarova. - M.: "Agro-industrial", 1991.- 463 p., il.
3. Makarov V.A. Vetsanekspertyza syshchevyh food on the pages and in the hosiaystva. The worker. – M.: "Kolos"-2000.306 p.
4. V.I.Khomenko, V.Ya.Shablyi, N.K.Velvet, etc. Businessman for veterinary and sanitation experiments of squeaky food tummy. Pod ed. V.I.Khomenko K.: "Harvest".-1989.-352 p.



5. Rules of veterinary and sanitary examination of milk and dairy products and requirements for their implementation of 20.04.2004 Order No. 49. 6. Resolution of the Cabinet of Ministers of Ukraine of June 14, 2002. No. 833 "On approval of the Procedure for selection of samples of animal, vegetable and biotechnological products for research".

7. State hygienic standards "Permissible levels of radionuclide content  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$  in food and drinking water", approved by the Chief State Sanitary Doctor of Ukraine on June 25, 1997.

8. Directive EU (96/23/EC) of April 29, 1996, on mayors on the control of otdelnyh veschestva and their final sodержaniya in not clogged live and products of the viviparous proishozhdeniya, directives 85/187/EEC and 86/469/EEC and Adopted 89/187/EEC and 91/664/EEC.

9. The plan of state monitoring of residual amounts of toxicants in animal products for 2003, approved by the Order of the Chief State Inspector of Veterinary Medicine of Ukraine dated 16.10.02 No. 65.

10. "Permissible doses, concentrations, quantities and levels of pesticide content in agricultural raw materials, food products, working area air, atmospheric air, water reservoirs, soil" DSanPiN 8.8.1.2.3.4-000-2001.

11. "Hygienic trebovaniya bezpasnost and pischevy tsinnosty syshchevyh grocery" SanPiN 2.3.2.1078-01, Russia.

12. State sanitary rules and regulations for enterprises and vessels producing products from fish and other aquatic living resources of 06.05.2003 Order No. 197

13. Veterinary and sanitary examination of food products in Ukraine. Regulatory documents. Reference book.-Lviv: "Leonorm".-T. 1.-2000.-283 p. 14. Veterinary and sanitary examination of food products in Ukraine. Regulatory documents. - Handbook. - Lviv: "Leonorm".-T.2.-2000.-292 p. 15. Veterinary and sanitary examination of food products in Ukraine. Regulatory documents. - Handbook. - Lviv: "Leonorm".-T.3.-2000.-288 p.

### **13. Information resources**

<https://dpss.gov.ua/publicnainformaciya/zakonodavstvo>

<https://dpss.gov.ua/diyalnist/normativnopravovabaza>