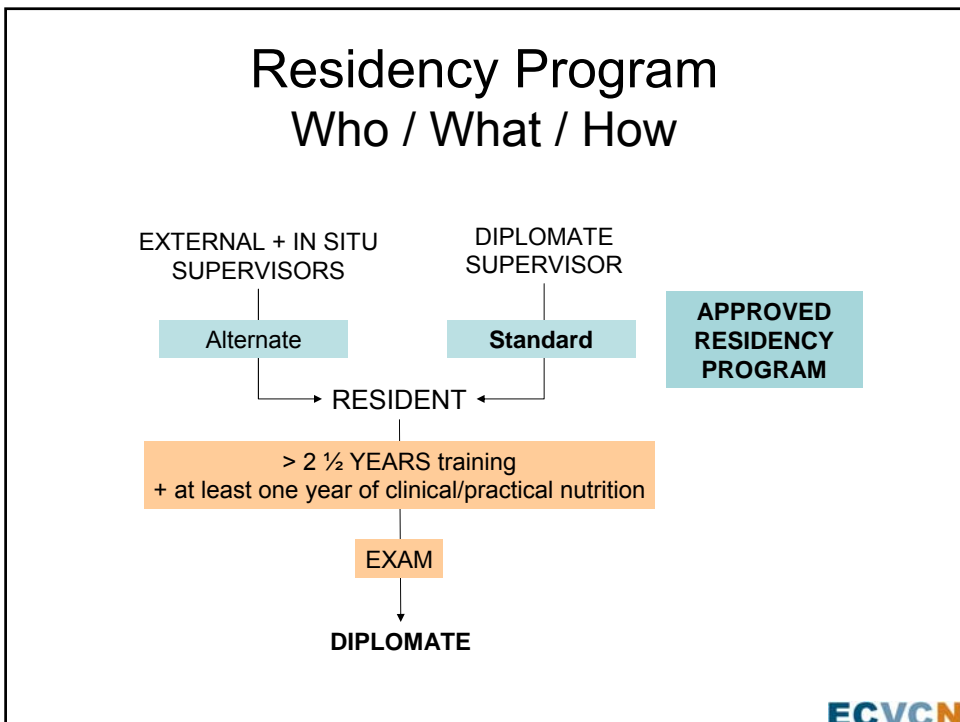




ECVCN
RESIDENCY




YOU ARE A ...	PROCEDURES and reports to be sent to COMMITTEES	
DIPLOMATE	Submit a Residency program prior to supervising a resident	⇒ EDUCATION
RESIDENT CANDIDATE	- CV - description of the Residency program including the year of clinical/practical nutrition	⇒ EDUCATION
RESIDENT'S SUPERVISOR	<u>Yearly report</u> (< 1st July) + 2 essay questions or case studies (< 31st December)	⇒ EXAMINATION
RESIDENT	Yearly report (< 1st July)	⇒ CREDENTIAL
RESIDENT + SUPERVISOR	To sit the exam (year N) Send a letter of application to take the exam (< 1st January Year N - to be completed by April 1st if additional information is required)	⇒ CREDENTIAL
NEW Diplomate	Send 10 questions (MCQ and essay) in order to become a definitive Diplomate	⇒ EXAMINATION

RESIDENCY PROGRAM	WHAT IS IT ABOUT?
	<ul style="list-style-type: none"> The formalized Residency Program is a full-time, non-degree period of at least 2 and a half year of supervised training, post-graduate education and experience in the science and practice of veterinary nutrition. The majority of the clinical training will take place at the parent institution and will be supervised by the Resident Supervisor but external instruction, approved by both the Program Director and the Resident Supervisor, is allowed and encouraged. Such periods of external instruction may be used to meet the clinical training requirements or may be additional or ancillary to them. If a further degree is undertaken at the same time as the Residency Program, the training can be taken consecutively or on a part time basis as long as the total time approximates to two and a half years and the total time does not exceed five years. Each supervisor shall prepare a statement that the candidate has satisfactorily completed the approved time of training. There shall be no restriction on training institutions as long as they meet the requirements for approved postgraduate programs.

ECVCN Training program	General aims
	<ol style="list-style-type: none">1. Promotion of aptitude and proficiency in the field of veterinary nutrition, including nutritional consulting and dietetic treatment;2. Instruction in science and practice of veterinary and comparative nutrition and their supporting disciplines;3. Knowledge of the integrated approaches for food production,4. Opportunity to pursue career goals in teaching, research, clinical or public service.
	Objectives
	<ul style="list-style-type: none">• to develop technical sophistication and major professional expertise in the areas of veterinary medicine and nutrition• to provide experience in research and investigative projects to develop critical thinking, clinical experience, and acquisition of the ability to assess experimental data• to provide experience in presentation techniques for teaching and education• to develop a scientific basis for veterinary medical practice, food and feed industry, and administration that allow the successful trainee to manage large and small animal patients,• problems of herd health and veterinary public health with nutrition as a central area



RESIDENCY PROGRAM	includes
RESIDENT	<ol style="list-style-type: none">1. The candidate must have a satisfactory moral and ethical standing in the profession.2. The candidate must possess a European DVM/VMD or equivalent degree from a recognized veterinary college, at the discretion of the ECVCN Credential Committee.3. The applicant must be licensed to practice veterinary medicine and surgery in the European Union, unless exempted of this obligation by the ECVCN Credential Committee.



RESIDENT CLASS

What is it about?

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RESIDENT CLASS

2 DAYS

2 x ½ a day => Lectures by Diplomates/guests

(These presentations shall not be presented at the ESVCN congress that follows the class.)

½ a day => short Reviews (+/- cases)

presented
by Residents

½ a day => clinical/practical cases

OBJECTIVES

- To expose the residents to recognised Specialists (Dipl. ECVCN, Dipl. in other specialties, invited speakers) who present a review on their speciality.
- To train and prepare the residents for the ECVCN exam :
 - * by improving their knowledge even in topics they are not familiar with (Parts I & II)
 - * By improving their discussion around cases (Part III).
- To encourage residents to **present** clinical/practical cases, as they have to present at least 3 written cases (with at least one published) to be able to take the exam (see To sit the exam)

The resident class is held prior to the Annual ESVCN congress.
Residents are encouraged to attend the Resident Class.

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EXAM

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DIPLOMATE EXAM

RESIDENT
(+ supervisor)

To sit the exam

To sit the exam (year N)

Send (before the 1st January Year N) a letter of application to take the exam, **signed by resident & supervisor**. The complete file must be sent by the 1st of April to the CREDENTIAL COMMITTEE

Requirements:

- * 2.5 yrs in nutrition
- * > 1 yr training in practical/clinical Nutrition
- * principal author of 2 scientific publications (at least one of them should be an original study and in English with first authorship of the candidate)
- * to provide 3 written cases, at least one published
- * recognition, where applicable, as a specialist at national level

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ECVCN EXAM	EXAMINATION PROCEDURE consists of 3 parts
<ul style="list-style-type: none">- a general veterinary nutrition (Part I) examination and- a subspecialty (Part II) examination, both in written form, and- an oral case discussion (Part III). <p>The specialty areas are food producing animal nutrition and companion animal nutrition.</p>	
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ECVCN EXAM	EXAMINATION PROCEDURE consists of 3 parts
<p>- a general veterinary nutrition (Part I) examination</p> <p>Written exam that includes the basic knowledge in the area of animal nutrition:</p> <ul style="list-style-type: none">• 50 multiple choice and• 5 essay questions that must be completed in a maximum of 2 hours. <p>The "blueprint" for the general veterinary nutrition examination is:</p> <ul style="list-style-type: none">A. Biochemical and nutritional physiology (40 %)B. Nutritional requirements and general feeding strategies including nutrient intolerance, deficiency and excess. Species that are included in the basic skills: cattle, pig, poultry and major pet birds, dogs, cats, horses, small rodents (40 %)C. Animal nutrition and food quality/safety aspects, technology, legal aspects (20 %) <p>Questions will be related to nutritional metabolism and physiology, basic concepts of feed science, feed evaluation and requirements, general feeding strategies applied to healthy animals along the biological cycle, main and classical problems of nutritional deficiencies and toxicity diseases, environmental aspects and general legislation and legal aspects.</p> <p>The pass mark for the general veterinary nutrition (Part I) examination is 60%.</p>	
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ECVCN EXAM

EXAMINATION PROCEDURE consists of 3 parts

- a subspecialty (Part II) examination

related to the specific area of the candidate (food producing animal nutrition or companion animal nutrition)

written exam that must be completed in a maximum of 2 hours.

Food producing animals are cattle, small ruminants, pigs and poultry. Companion animals are all species kept for other purposes including horses. The candidates have to answer 50 multiple choice and 5 essay questions in a maximum of 2 hours.

The "blueprint" for the subspecialty examination is: in depth feed science and nutritional requirements (20%), applied nutrition in that area (40 %), clinical nutrition (40 %).

The pass mark for the subspecialty (Part II) examination is 60%.

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ECVCN EXAM

EXAMINATION PROCEDURE consists of 3 parts

- an oral case discussion (Part III)

That includes an oral discussion on a case and the practical aspects of nutrition and should have a fundamental nature, including the practical aspects of nutrition, clinical aspects, and aspects of nutritional physiology. The specialized nature is pertinent or applicable to the subspecialty area.

The subspecialty examination is an advanced-level examination utilizing if required visual aids and involving both a test of theoretical knowledge and an ability to solve problems. A candidate is asked to interpret and analyze the questions and problems presented, as if in a real world, clinical or diagnostic or research situation.

A candidate will be expected to interpret the case and to provide information necessary to answer the questions correctly.

The pass mark for the examination is a satisfactory level of problem solving capacities and knowledge in the given area. 60 % of the committee's questions have to be answered correctly. The time limit for part III is 60 min.

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ECVCN EXAM

EXAMINATION PROCEDURE

A candidate may sit **one, two or three examinations**. A candidate must pass all examination parts to be certified. **Candidates take the examinations in the order of parts I, II and III within the 8-year period.**

Candidates will be informed of the results during the ESVCN meeting and successful candidates will be received into membership as a diplomate while at that meeting. After successfully completing the veterinary nutrition examination and before receiving the certificate, each candidate must prepare and submit to the secretary a minimum of ten (10) questions. The questions must meet a minimum standard, but are not graded. At the discretion of the Examinations Committee, suitable questions may be added to the question bank for future examinations.

A candidate has **eight (8) years** (five consecutive examination periods) after the application is accepted to complete all phases of the examination successfully.

A limit of four (4) attempts (first time + 3 retakes) during one five year period will be granted for all parts of the examination. Any candidate who has not successfully completed all phases of the examination within eight years after application will be permitted to re-apply after a waiting period of one (1) year. Such candidates will be required to submit new applications and examination fees and must take the entire examination.

Examination shall be taken in **English only**; the use of dictionaries is permitted. Credentials of candidates who pass the examination will be forwarded to the President by the Chairperson of the examining committee.

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RESIDENCY EXAM

Examples for examination questions: Part 1. Written, General nutrition

Multiple choice questions:

1. Which statements on the pancreatic juice are correct?
 - The pancreatic secretion has an alkaline pH
 - The pH is determined by its high mucin concentration
 - The pH is determined by bicarbonate ions
 - Pancreatic secretion has high sodium and potassium concentrations
2. Fructans in grass
 - Are found in high concentrations during the summer period
 - Sudden cold temperature causes an accumulation of fructans
 - Have not been described
 - Cause potentially severe problems in horses due to their effect on the occurrence of laminitis

Essay questions

1. Describe the effects of deoxynivalenol in livestock nutrition and the potential impact for human health due to the intake of animal derived foodstuffs.
2. Comparative aspects of urinary stone formation in food producing animals and companion animals?

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RESIDENCY EXAM

Examples for examination questions: Part 2. Written sub specialties - MCQ

Multiple choice questions:

1. Which feeding method is most appropriate for a lactating bitch?
 - forced feeding of a solid diet by hand
 - small amounts of digestible food, with unlimited water
 - unlimited access to an unlimited amount of food
 - limited access to an unlimited amount of food
 - small amounts of a highly caloric food at frequent intervals
2. In cats, central retinal degeneration is associated with a dietary deficiency of:
 - Vitamin A
 - Arginine
 - Taurine
 - Vegetable proteins
 - Tyrosine
3. Storage fungi are belonging to:
 - Alternaria genus
 - Cladosporium genus
 - Fusarium genus
 - Aspergillus genus
4. The essential amino acid that is limiting in a swine diet based on corn and soybean meal is:
 - methionine
 - lysine
 - alanine

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RESIDENCY EXAM

Examples for examination questions: Part 2. Written sub specialty – Essay questions

Essay questions

1. Describe protein- and amino acid requirements and effects of deficiency in cats
2. Prebiotics in small animal nutrition: Definition, difference between pre- and probiotics, 3 examples of prebiotics, application of prebiotics in dog and cat nutrition (general and clinical nutrition).
3. Which are the most relevant regulations in the EU concerning “undesired substances” in feedstuffs?
4. Rumen acidosis: describe causes, pathogenesis, pathophysiology, consequences, prophylaxis.

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RESIDENCY EXAM

Examples for examination questions: Part 3. Case description and discussion

One case is presented.

Example: A horse owner sent in a sample of oats and asked for an evaluation of the hygienic state of the oats sample. After the use of this new batch of oats a higher frequency of “unspecific colic symptoms” were observed. The candidate describes the procedures that were performed to evaluate the problem and the problem is discussed in depth with the members of the examination committee. *(the candidate can ask for the results of various analysis)*

The expected skills of the candidate are in that case:

- Perform a detailed nutritional assessment on a patient or herd/flock/colony
- Request and interpret appropriate laboratory evaluation of animals to diagnose or manage nutrition-related problems and to monitor feeding plans
- Request appropriate laboratory evaluation of feeds to diagnose or manage nutrition related problems
- Recognize physical and laboratory signs of nutritional deficiencies and excesses
- Formulate a balanced ration for an individual or herd/flock
- Select appropriate form of nutrition support required in hospitalized patients

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SKILLS

- The knowledge in general nutrition for species other than the sub-specialty chosen can not be lower than the knowledge of a just graduate veterinarian
- The knowledge in metabolism, nutrition science... and specialized nutrition (depending on the sub-specialty) must be those of a specialist
- See additional file :
ECVCN syllabus – skills- .pdf

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SUGGESTED READING LIST-1

If you are looking for information on a topic, the following textbooks are considered serious and recommendable by the Education Committee.

- Recent Advances in Animal Nutrition, P. C. Garnsworthy, J. Wiseman
- Trace elements in human and animal nutrition, Walter Mertz
- Biology of Nutrition in Growing Animals, R. Mosenthin, Teresa Zebrowska, J. Zentek
- Manual of Veterinary Dietetics, T. Buffington, Sarah K. Abood, Cheryl Holloway
- Animal Nutrition, P. McDonald
- Nutritional Ecology of the Ruminant, P. J. Van Soest, 1994
- The encyclopedia of farm animal nutrition – M.F. Fuller, 2004
- Basic animal nutrition and feeding – W.G. Pond, D.C. Church, K.R. Pond, John Wiley & Sons, 1995
- Applied animal nutrition – P.R. Cheeke, Pearson Prentice Hall, 2005
- Farm animal metabolism and nutrition – J.P.F. D'Mello, CABI Publishing, 2000
- Ruminant physiology – K. Sejrsen, T. Hvelplund, M.O. Nielsen, 2006
- Livestock feeds and feeding – R.O. Kellems, D.C. Church, Prentice Hall, 2002
- Small animal clinical nutrition – M.S. Hand, C.D. Thatcher, R.L. Remillard, P. Roudebush, Mark Morris Institute, 2000
- Nutrition in the prevention and treatment of disease – A.M. Coulston, C.L. Rock, E.R. Monsen, Academic Press, 2001
- Feed evaluation – Principles and practice – P.J. Moughan, M.W.A. Verstegen, M.I., Visser-Reyneveld, 2000
- Lipid metabolism and health – R.J. Moffat & B. Stamford, 2006

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SUGGESTED READING LIST-2

If you are looking for information on a topic, the following textbooks are considered serious and recommendable by the Education Committee.

- Protein turnover – J.C. Waterlow, 2006
- Amino acids in animal nutrition – J.P.F. D'Mello, 2003
- National Research Council (2006)
- National academy of sciences publications, animal nutrition program, nutrient requirements of domestic animals, report series:
 - Nutrient requirements of Dogs and Cats (2006)
 - Nutrient Requirements of Horses (2008)
 - Minerals and Toxic Substances in Diets and Water for Animals (2005)
 - Nutrient Requirements of Dogs and Cats (2006)
 - Nutrient Requirements of Nonhuman Primates (2003)
 - Nutrient Requirements of Dairy Cattle (2001)
 - Nutrient Requirements of Beef Cattle (2000)
 - Nutrient Requirements of Swine (1998)
 - Nutrient Requirements of Small Ruminants: Sheep, Goats, Cervids, and New World Camelids (2006)

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SUGGESTED READING LIST-3

JOURNALS : at a specialized level, Residents are expected to have a regular look at the publications in the references marked with a **X** and at the publications related to Nutrition (&/or sub specialty) in the other ones

- X Journal of Animal Physiology and Animal Nutrition
- X **Abstract books of the Annual Meeting of the Society of Animal Nutrition Physiology**
- X Archives of Animal Nutrition
 - The American Journal of Clinical Nutrition
 - Annals of Nutrition & Metabolism
 - The British Journal of Nutrition
 - European Journal of Nutrition
- X The Journal of Nutrition
 - Journal of the American College of Nutrition
 - Nutrition Research
- Related Articles from
 - American Journal of Veterinary Research
 - Compendium for Practicing Veterinarian Continuing Education
 - Equine Veterinary Journal
 - Journal of Animal Science
 - Journal of Dairy Science
 - Journal of Veterinary Internal Medicine
 - Journal of Small Animal .Practice
 - Kleintierpraxis *German*
 - The Veterinary Record

Reading list updated: august 2008

ECVCN Education Committee

