

Job Analysis for the Nutrition Specialty Exam

Conducted on behalf of the:

**American College of Veterinary Internal Medicine
(ACVIM)**

March 13, 2026

Prepared by:



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Assessment Services

ACKNOWLEDGEMENTS

We would like to thank the many individuals who provided invaluable assistance throughout the conduct of the job analysis for the American College of Veterinary Internal Medicine (ACVIM) Nutrition Specialty (NUTRITION) Exam.

Above all, we thank the dedicated professionals who generously contributed their time and expertise. In particular, we would like to thank the 20 subject matter experts who participated in the focus group meetings and the in-person Job Analysis Panel.

At ACVIM, Shannon Carter, Chief Executive Officer; Nicole Finn, Senior Director, Certification and Accreditation; Annie Swan, Senior Certification and Accreditation Manager; and Sarah Zimmer, Certification and Accreditation Specialist, provided outstanding guidance, coordination, and support throughout the project.

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EXECUTIVE SUMMARY

“The American College of Veterinary Internal Medicine (ACVIM) is an AVMA-recognized veterinary specialty organization® dedicated to improving the lives of animals and people through education, training and certification of specialists in veterinary internal medicine, discovery and dissemination of new medical knowledge, and increasing public awareness of advances in veterinary medical care.”¹

ACVIM requested a Job Analysis Study from Prometric for their Nutrition Specialty (NUTRITION) Exam. A job analysis is designed to obtain descriptive information about the tasks performed on a job and the knowledge needed to adequately perform those tasks. The purpose of this job analysis was to:

- develop tasks and knowledge related to the work performed by veterinarians specializing in nutrition; and,
- update the content outline for the NUTRITION Exam.

Conduct of the Job Analysis

The job analysis consisted of background research, expert focus group input, and review by a Job Analysis Panel composed of subject matter experts in veterinary nutrition. The role of the Job Analysis Panel was limited to defining what content should be assessed on the NUTRITION Examination. Decisions regarding examination format, structure, and item types are reserved for the ACVIM Certification Council.

Background Research

Development of the updated ACVIM NUTRITION Exam content outline began with a desk study of relevant materials provided by ACVIM. Three focus groups of nutrition experts were convened to review the current exam blueprint and discuss potential revisions. An AI-assisted qualitative analysis was used to support synthesis of focus group feedback and reference materials to generate a draft content outline. This draft was prepared for review by the Job Analysis Panel, ensuring that the process incorporated diverse professional input and rigorous analysis.

Panel Review/Content Outline Development

The Job Analysis Panel met in Denver, Colorado on February 10th and 11th, 2026. Panel members reviewed and refined the draft domains, task statements, and associated knowledge statements to ensure clarity, relevance, and representativeness of current practice. The Panel reached consensus on the final examination content and recommended relative domain weights to reflect the importance of each content area to competent practice in veterinary nutrition.

Summary

This study adopted a professionally sound, expert-based approach to identify the tasks and knowledge essential to competent performance of veterinarians specializing in nutrition. The job analysis incorporated input from a representative group of practicing professionals and was conducted in accordance with established job analysis practices. The results support a defensible foundation for updating the NUTRITION Exam.

¹ <https://www.acvim.org/about-acvim> Retrieved March 12th, 2026

INTRODUCTION

“The American College of Veterinary Internal Medicine (ACVIM) is an AVMA-recognized veterinary specialty organization® dedicated to improving the lives of animals and people through education, training and certification of specialists in veterinary internal medicine, discovery and dissemination of new medical knowledge, and increasing public awareness of advances in veterinary medical care.”²

The central focus of this job analysis was to identify the tasks and knowledge that are important for competent performance as a veterinarian specializing in nutrition. The development of a content-valid credentialing program is based on tasks and knowledge identified through the job analysis process.

This report describes the job analysis, including the:

- rationale for conducting the job analysis;
- methods used to define job-related tasks and knowledge; and,
- creation of the final content outline for the Nutrition Specialty (NUTRITION) Exam.

Job Analysis Study and Adherence to Professional Standards

Job analysis refers to procedures designed to obtain descriptive information about the tasks performed on a job and/or the knowledge necessary to adequately perform those tasks. The specific type of information collected during a job analysis is determined by the purpose for which the information will be used.

For purposes of developing credentialing programs, a job analysis should identify important tasks and knowledge deemed to be important by professionals specializing in veterinary nutrition.

The use of a job analysis (also known as practice analysis, role and function study, or role delineation study) to define the content domain(s) is a critical component in establishing the content validity of a program. Content validity refers to the extent to which the content covered by a program is representative of the tasks and knowledge required for a particular job.

A well-designed job analysis should include a representative group of subject-matter experts who reflect the diversity within the profession. Diversity refers to regional or job context factors and to subject-matter expert factors such as experience, gender, and race/ethnicity. Demonstration of content validity is accomplished through the judgments of subject-matter experts. The process is enhanced by the inclusion of subject-matter experts who represent the diversity of all relevant areas of expertise.

² <https://www.acvim.org/about-acvim> Retrieved March 12th, 2026

*The Standards for Educational and Psychological Testing*³ (2014) (*The Standards*) is a comprehensive technical guide that provides criteria for the evaluation of tests, testing practices, and the effects of test use. It was developed jointly by the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME). The guidelines presented in *The Standards*, by professional consensus, have come to define the necessary components of quality testing. As a consequence, a testing program that adheres to *The Standards* is more likely to be judged as valid and defensible than one that does not.

As stated in Standard 11.13,

“The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale and evidence should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in that occupation and are consistent with the purpose for which the credentialing program was instituted.... Typically, some form of job or practice analysis provides the primary basis for defining the content domain...” (p. 181-182)

The job analysis for the NUTRITION Exam was designed to follow the guidelines presented in *The Standards* and to adhere to accepted professional practice.

³ American Educational Research Association, American Psychological Association, National Council on Measurement in Education. (2014). *The Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association.

METHOD

The job analysis for the ACVIM NUTRITION Examination was conducted using a structured, expert-panel-based methodology designed to identify the tasks and knowledge required for competent performance as a veterinary nutrition specialist. The study emphasized expert review and consensus to ensure that the resulting test specifications reflect current practice and are defensible for examination development.

A draft set of domains, task statements, and associated knowledge statements was developed prior to the panel meeting using multiple sources, including the existing NUTRITION exam content outline, expert focus group input, analysis of relevant reference materials, and additional information provided by ACVIM. This draft content outline served as the basis for review by the Job Analysis Panel.

Utilizing multiple subject matter experts to review and refine the tasks and knowledge statements provided an important check on the initial background research and reduced the likelihood that unimportant or unrepresentative content would be included in the test specifications. The use of multiple experts reduces the likelihood that one expert's input will influence the entire content outline.

The methodology used to conduct the job analysis is described in detail below and included the following steps:

1. Conduct of Planning Meeting

Project-planning discussions were held via email and conference calls between ACVIM and Prometric. Meeting participants included ACVIM and Prometric staff responsible for the conduct of the job analysis. During the planning discussions, several issues were explored, including expert selection, meeting dates, logistics, and job analysis methodologies.

2. Development of the Draft Content Outline

Prior to the panel meeting, Prometric prepared initial draft test specifications that included the proposed domains, task statements, and associated knowledge statements. The draft drew upon the existing NUTRITION exam blueprint, input from expert focus groups, and an AI-assisted comprehensive review of pertinent references and resources. In addition, a pre-meeting document outlining the job analysis process and best practices for reviewing and composing tasks and knowledge statements was provided to panel members ahead of the meeting to ensure they were well-equipped to participate effectively in the content development and validation process. A copy of the pre-meeting document is included as Appendix A. The demographic information of SMEs who participated in the focus group meetings is provided in Appendix B (Table B1).

3. Job Analysis Panel Review and Development of Test Specifications

The Job Analysis Panel met in person in Denver, Colorado, on February 10th and 11th, 2026. The panel was composed of 10 subject matter experts in veterinary nutrition selected by ACVIM. Prometric staff facilitated the meeting and guided panelists through a systematic review of the draft domains, tasks, and knowledge statements. The demographic information of the SMEs who participated in the Job Analysis Panel is provided in Appendix B (Table B2).

Parameters of the Job Analysis Panel Meeting

The Job Analysis Panel meeting was conducted within clearly defined parameters to ensure that the resulting test specifications reflected essential, current, and defensible practice requirements for veterinary nutrition specialists. Panel members were charged with reviewing and validating the content of the NUTRITION Examination by evaluating the proposed domains, task statements, and associated knowledge statements for clarity, relevance, importance, and representativeness of competent practice. The panel's role was limited to defining what content should be assessed on the examination, including recommending domain weights. Decisions regarding exam format, item types and item numbers will be determined separately by the ACVIM Certification Council.

Development of Test Specifications

During the meeting, the Job Analysis Panel conducted a systematic review and refinement of the draft content outline. Panelists focused on identifying tasks and knowledge essential for competent performance of a Nutrition Diplomate and ensured that statements were applicable across species. Content was reviewed to confirm alignment with current professional standards and relevance to credential-worthy performance. These parameters ensured that the finalized test specifications provide an appropriate foundation for subsequent examination development activities.

The panel discussion resulted in the finalized domains, tasks, and knowledge statements for the NUTRITION Exam. A total of 108 task and knowledge statements were identified by the Job Analysis Panel as important to competent performance in veterinary nutrition. Table 1 presents the distribution of statements across domains.

Table 1. Distribution of Statements by Domain for the Nutrition Exam

Domain	Total Statements	Task	Knowledge
A. Nutritional Biochemistry and Requirements	25	5	20
B. Nutritional Physiology and Pathophysiology	22	8	14
C. Assessment of Individual/Group	7	5	2
D. Dietary Assessment and Feeding Practice	14	11	3
E. Develop a Nutritional Plan for the Individual/Group	18	8	10
F. Food/Feed and Supplement Production, Safety, Regulation, and Research Methods	22	7	15
Total	108	44	64

Assignment of Domain Weights

Following finalization of the domains, tasks, and knowledge statements, the panel assigned relative weights to each domain to reflect their importance to competent practice as a Nutrition Diplomate. This was accomplished by having each of the participants give their individual estimates, entering those estimates into a spreadsheet, and discussing the aggregated data. Table 2 below shows the domain percentage weights assigned by the Job Analysis Panel.

Table 2. Panel-Recommended Weighting for the Nutrition Exam

Domain	Percentage Weight
A. Nutritional Biochemistry and Requirements	20%
B. Nutritional Physiology and Pathophysiology	15%
C. Assessment of Individual/Group	15%
D. Dietary Assessment and Feeding Practice	18%
E. Develop a Nutritional Plan for the Individual/Group	18%
F. Food/Feed and Supplement Production, Safety, Regulation, and Research Methods	14%
Total	100%

The finalized domains, tasks, knowledge statements, and domain weights formed the updated test specifications for the ACVIM NUTRITION Exam. Appendix C contains the full approved test specifications. Appendix D provides a comparison of exam domain weighting from the existing (2023) NUTRITION test specifications (Table D1) and a crosswalk linking the existing (2023) statements to their corresponding statements in the revised (2026) test specifications (Table D2).

4. Certification Council Decision on Exam Design

Following completion of the Job Analysis Panel meeting, the updated test specifications will be submitted to the ACVIM Certification Council for review. The Certification Council will consider the panel-recommended domains, task statements, knowledge statements, and domain weights and will make final determinations regarding the examination design, including decisions related to exam structure, number of items, and item format. Once approved, the test specifications and exam design decisions established by the Certification Council will guide subsequent examination development and implementation activities.

SUMMARY AND CONCLUSION

The job analysis for the ACVIM NUTRITION Exam was conducted to:

- identify tasks and knowledge important to the work performed by veterinarians specializing in nutrition; and,
- create test specifications that may be used as guidance for the NUTRITION Exam.

The task and knowledge statements were developed through an iterative process involving the combined efforts of subject matter experts, ACVIM, and Prometric staff. The tasks and knowledge were verified as important through the review of experts and provided the foundation for development for the NUTRITION Exam. Overall, the job analysis utilized a multi-method approach to identify the tasks and knowledge important to the work performed by veterinarians specializing in nutrition. The resulting test specifications can be utilized in all future NUTRITION Exam development activities.



PREPARING FOR YOUR PARTICIPATION IN ACVIM'S
NUTRITION EXAM
PANEL JOB ANALYSIS
FEBRUARY 10-11, 2026

PREPARED BY:



INTRODUCTION

The American College of Veterinary Internal Medicine (ACVIM) has commissioned a panel job analysis for its Nutrition Exam from Prometric.

A job analysis is designed to obtain descriptive information about the tasks performed in a job and the knowledge needed to support the performance of those activities. The purpose of this job analysis is to:

- review and revise the domains, tasks, and knowledge related to work performed by veterinarians specializing in nutrition, and
- develop test specifications for the Nutrition Exam.

PREPARING FOR THE PANEL JOB ANALYSIS

This document provides information to prepare you for participation in the panel job analysis, including:

- the meeting schedule and agenda,
- a summary of the job analysis process,
- information on the creation/revision of task and knowledge statements, and
- an overview of the test specification development process.

You-Min Lin, Ph.D., a Prometric Test Research and Development Specialist, will serve as the meeting facilitator.

PARTICIPATING IN A JOB ANALYSIS MEETING

During the meeting, we will define the major content areas (domains) along with the major tasks performed and the knowledge needed for competent performance. The information produced in this meeting will form the test specifications, or blueprint for the Nutrition Exam.

Your role—along with the other panel members— is to actively provide information during the meeting based on your professional expertise about the work performed by individuals practicing as nutrition specialists.

On behalf of ACVIM, we welcome you as a critical contributor to this important project by serving on the Job Analysis Panel!

ACCOMMODATIONS & MEETING LOCATION



The Inverness Denver, a Hilton Golf & Spa Resort

200 Inverness Drive West
Englewood, Colorado 80112 USA
(215) 625-2900

Meeting Room: The Boardroom (Lobby Level)

[The Inverness Denver, a Hilton Golf & Spa Resort](#)

MEETING SCHEDULE

TUESDAY, FEBRUARY 10

START TIME: 8:00 am
BREAK: Mid-Morning
LUNCH: Noon
BREAK: Mid-Afternoon
ADJOURNMENT: 5:00 pm

WEDNESDAY, FEBRUARY 11

START TIME: 8:00 am
BREAK: Mid-Morning
LUNCH: Noon
BREAK: Mid-Afternoon
ADJOURNMENT: 5:00 pm

MEALS PROVIDED BY ACVIM

- **Breakfast (Tuesday & Wednesday):**
Garden Terrace
6:30 am – 9:00 am
- **Lunch – Tuesday:**
Breckenridge Brewery (Garden Level, one level below the lobby)
- **Lunch – Wednesday:**
Garden Terrace (Lobby Level, next to Fireside Bar & Grill)

AGENDA

- Welcome and Introductions
- Overview of Job Analysis
- Development of Test Specifications
 - Recommending Test Content (Review/Edit Domains, Tasks, Knowledge)
 - Assign Domain Weights
- Crosswalk Test Content (Mapping Previous Exam Content to New Test Specifications)

JOB ANALYSIS DEFINED

A job analysis (also known as a job task analysis, practice analysis, role and function study, body of knowledge study, or role delineation) refers to procedures designed to obtain descriptive information about the professional activities performed on a job and the important knowledge, skills, and abilities (KSAs) needed to competently perform those professional activities. The specific type of job information collected for a job analysis is determined by the purpose for which the information will be used. For purposes of developing certification examinations, a job analysis should identify important KSAs necessary for competent performance.

In addition, a well-designed job analysis should reflect the diversity within the job. Diversity refers to regional or job context factors (e.g., geographic region, practice setting) and to subject matter expert factors (e.g., professional experience, gender).

ADHERENCE TO THE STANDARDS FOR EDUCATIONAL & PSYCHOLOGICAL TESTING

The job analyses conducted by Prometric are designed to adhere to professional practice guidelines presented in The Standards for Educational and Psychological Testing (2014) (The Standards).

The Standards is a comprehensive technical guide that provides criteria for the evaluation of tests, testing practices, and the effects of test use. It was developed jointly by the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME). The guidelines presented in The Standards have, by professional consensus, come to define the necessary components of quality testing. Consequently, a testing program that adheres to The Standards is more likely to be judged valid and defensible than one that does not.

The Standards emphasize the concept of content validity and the need to conduct a job analysis to assure that the knowledge assessed in credentialing initiatives are in fact limited to those important for competent performance. As noted in Standard 11.13, “The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale and evidence should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in that occupation and are consistent with the purpose for which the credentialing program was instituted...Typically, some form of job or practice analysis provides the primary basis for defining the content domain...” (pp. 181-182).

PANEL JOB ANALYSIS PROCESS

- AI-assisted development (Finetune Catalog) of draft test specifications, including analysis of:
 - Transcripts of focus groups of subject matter experts
 - Existing test specifications
 - Reference materials
- Job analysis panel development of the test specifications
- Certification Council approval and finalization of exam format

CONDUCT OF THE JOB ANALYSIS MEETING

The objectives of the study are two-fold: (1) to construct with subject-matter experts a comprehensive delineation of tasks and knowledge related to important work activities, and (2) to create Test Specifications that incorporate those tasks and knowledge.

STEP 1: REVIEW DRAFT TEST SPECIFICATIONS & DELINEATE DOMAINS, TASKS, AND KNOWLEDGE

The major aim of conducting a job analysis is to develop a concise and logical compilation of what professionals do in specific terms that can be readily communicated and understood. The delineation procedure involves a number of steps including the identification of (1) domains, (2) tasks, and (3) knowledge underlying the performance of the tasks.

1. Domains: These are also known as topic areas, content areas, or dimensions and represent the:

- a. professional responsibilities
- b. knowledge needed to perform one's professional responsibilities

These may be characterized as major headings in an outline format and may include a brief behavioral description of the domain.

2. Tasks: When all domains have been identified, each domain will be described in terms of the tasks performed to fulfill important job responsibilities. The tasks identified by the Job Analysis Panel must cover all aspects of the work that are relevant to the objectives of the study.
3. Knowledge: After the domains and tasks have been compiled, the knowledge associated with the performance of activities is identified.

EXAMPLE: DOMAINS (CONTENT AREAS)

The test specifications include several domains, each containing task statements and the associated knowledge needed for competent performance. The structure of a domain is shown below:

- A. Domain
 1. Task
 - a. Knowledge
 - b. Knowledge
 - c. Knowledge
 - ...
 2. Task
 - a. Knowledge
 - b. Knowledge
 - ...
 3. Task

Below is an abbreviated example of the aforementioned domain structure (for illustration purposes):

A. Nutritional Biochemistry and Requirements

1. Distinguish nutrients by their classification, metabolism, interactions, and safety boundaries
 - a. Essential vs. nonessential vs. conditionally essential amino acids
 - b. Carbohydrates including fiber, including absorbable, digestible, fermentable, and non-fermentable categories
 2. Explain energy and energetics, including measurement methods
 - a. Net energy systems, Atwater factors (standard vs. modified), energy density concepts
 - b. Indirect calorimetry, direct calorimetry, bomb calorimetry, practical ME estimation
 - c. Effects of energy density on intake, palatability, and body condition
- B. Nutritional Physiology and Pathophysiology
1. Describe the physiology across organ systems
 - a. Alimentary/Digestive
 - b. Endocrine
 - c. Metabolic
 2. Describe nutrient-gene interactions (epigenetics, breed differences, nutrigenomics)
 - a. Epigenetics and nutrigenomics concepts, breed- and species-specific gene-nutrient interactions
 - b. Nutrigenomic approaches to disease prevention and personalized nutrition

WRITING TASKS

Tasks are distinct, identifiable, specific job-related activities performed by professionals in your field that are necessary for competent performance. Tasks should begin with action verbs such as:

Administer	Calculate	Counsel	Document	Identify	Interview	Negotiate	Read	Revise
Analyze	Compute	Describe	Establish	Instruct	Maintain	Obtain	Recommend	Schedule
Assess	Conduct	Design	Evaluate	Integrate	Measure	Perform	Report	Supervise
Audit	Consult	Discuss	Formulate	Interpret	Monitor	Plan	Review	Write

A few examples of some *commonly misused* verbs that should be avoided because of ambiguity are:

Assist	Consider	Determine	Help	Know	Participate	Process	Understand
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Since tasks vary in complexity, the writer should expect to have statements of varying length and complexity. The following are some examples of appropriately written tasks:

- Interpret body weight, body condition, muscle mass, and changes over time
- Obtain accurate and complete diet/ration history, including treats, supplements, and foods for medication administration
- Describe methods to manage animals with altered appetites

WRITING KNOWLEDGE STATEMENTS

The development of knowledge statements requires inferring behaviors from the tasks. In the writing of these statements, conciseness with specificity is the goal. Avoid using adjectives modifying the level or extent of the knowledge (e.g., some, thorough, clearly, effectively), as these qualifiers introduce ambiguity and subjectivity into the interpretation of the statements.

REVIEWING THE TASK AND KNOWLEDGE STATEMENTS

Ask the following questions after the draft listing of tasks and knowledge has been created:

CLARITY: Are the domains succinct? Are the tasks and knowledge clearly worded?

RELEVANCE: Are the tasks and knowledge relevant to the work performed by individuals practicing as nutrition specialists?

REDUNDANCY: Are the tasks and knowledge unique and discrete?

OMISSIONS: Have any important tasks and knowledge been omitted?

COMPREHENSIVENESS: Are the domains, tasks, and knowledge comprehensive and representative?

STEP 2: RECOMMENDATIONS FOR DOMAIN WEIGHTS

The Job Analysis Panel will recommend the content weighting (percentage of items). The Panel members will be led through an activity where they assign a percentage weight to each domain for the Nutrition Exam. After reviewing all relevant information, the Panel will determine the optimal percentage weights for each domain.

The approved test content weights for each domain will be used to guide examination development activities including item writing and examination assembly.

STEP 3: CROSSWALK TEST CONTENT

After finalizing the new test specifications, the panel will review the existing test plan and crosswalk each content area to the updated specifications. This process involves mapping tasks and knowledge statements from the old plan to the new one, identifying corresponding areas and any gaps. The crosswalk informs exam development activities, such as recoding existing items under the new specifications, retiring outdated items, and pinpointing areas where new questions must be developed to align with the new test specifications.

NEXT STEPS: WHAT HAPPENS AFTER THIS MEETING?

Following this meeting, the Certification Council will design the exam, including its structure, the number of items, and item types, based on the content areas outlined in the new specifications. Once the exam design is complete, all subsequent development activities will follow these guidelines. This will include item development and review, assembly of the test form, and pilot testing. The new exam is scheduled to launch for the 2027 administration. A standard-setting process will be conducted to establish the passing score for the new form, and candidates will be scored according to this standard.

APPENDIX B. SUBJECT MATTER EXPERTS

Table B1. Focus Group Subject Matter Experts

Current Position	Years of Experience	Highest Degree	Field of Specialization	Gender	Age	Race/ National Origin	Location	Focus Group Meeting
Associate Director of Veterinary Nutrition	8	DACVIM	Nutrition	Female	41-50	Caucasian/White	CA	1
Clinical Associate Professor of Nutrition	16	DVM, PhD	Nutrition	Female	41-50	Caucasian/White	TN	1
Manager of Nutrition Research	9	DVM	Nutrition	NR	NR	NR	NY	1
Clinical Professor	20	DVM, PhD	Small Animal Nutrition	NR	NR	NR	TN	1
Lead Veterinarian of Custom Diet Service	4	DVM	Nutrition	Male	21-30	Caucasian/White	OH	1
Scientific Communications Nutritionist	13	DVM, PhD	Veterinary	Female	41-50	Caucasian/White	VA	2
CEO	24	DVM	Veterinary Medicine	Male	51-60	Caucasian/White	CA	2
Professor/Extension Veterinarian	45	PhD	Ruminant Nutrition	Male	61+	Caucasian/White	PA	2
Associate Dean Clinical Affairs	40	DVM	Veterinary Medicine	Female	61+	Caucasian/White	AB	2
Head of Veterinary Affairs	11	DVM	Nutrition	Female	31-40	Caucasian/White	FL	2
Assistant Professor	4	Ph.D.	Genetics	Male	41-50	African American	CA	2
Associate Veterinarian	7	DVM, DACVIM NUTRITION	Nutrition	Female	31-40	Hispanic/Latino	CA	3
Scientific Communications Manager	1	DVM	Clinical Veterinary Nutrition	NR	31-40	Caucasian/White	FL	3
Clinical Nutritionist	18	DVM	Nutrition	NR	NR	NR	CA	3
Manager of Scientific Communication	10	DACVIM	Nutrition	Male	31-40	Caucasian/White	NY	3

NR= Not reported

Table B2. Job Analysis Panel Subject Matter Experts

Current Position	Years of Experience	Highest Degree	Field of Specialization	Gender	Age	Race/ National Origin	Location
Clinical Associate Professor of Nutrition	16	DVM, PhD	Nutrition	Female	41-50	Caucasian/White	TN
Manager of Nutrition Research	9	DVM	Nutrition	NR	NR	NR	NY
Associate Dean Clinical Affairs	40	DVM	Veterinary Medicine	Female	61+	Caucasian/White	AB
Scientific Communications Nutritionist	13	DVM, PhD	Veterinary	Female	41-50	Caucasian/White	VA
Clinical Nutritionist	18	DVM	Nutrition	NR	NR	NR	CA
Executive Director/Chief Academic Officer	15	VMD	Nutrition	Female	41-50	Caucasian/White	KS
Clinical Nutrition Consultant	20	PhD	Animal Nutrition	Female	41-50	Caucasian/White	Cork, Ireland
Board Certified Veterinary Nutritionist	17	DVM	Veterinary Nutrition	Female	41-50	Caucasian/White	MA
Director, External Relations	13	DACVIM	Nutrition	Male	51-60	Caucasian/White	MO
Internal Medicine/Clinical Nutrition Specialist	10	DVM	Internal Medicine/Nutrition	Female	41-50	Caucasian/White	PA

NR= Not reported

APPENDIX C. FULL TEST SPECIFICATIONS

Nutrition Test Specifications (2026)		Weight
A. Nutritional Biochemistry and Requirements		20%
1. Distinguish nutrients by their classification, metabolism, interactions, essentiality and safety boundaries		
a. Protein and amino acids (including nitrogen balance)		
b. Carbohydrates (including fiber)		
c. Lipids and fatty acids (including ketogenesis)		
d. Vitamins and vitamin-like compounds		
e. Minerals		
f. Water		
2. Explain energy and energetics including measurement methods		
a. Energy systems (gross, digestible, metabolizable, net)		
b. Animal-specific: Indirect vs. direct calorimetry		
c. Energy metabolism, substrate utilization		
d. Food-specific: Bomb calorimetry, metabolizable estimations, Atwater factors (standard vs. modified)		
3. Describe nutritional aspects of acid-base regulation		
a. Base excess, dietary cation vs. anion difference		
b. Alkalinizing and acidifying compounds and their metabolic/clinical implications		
c. Interaction of fluids and nutrition with acid-base status		
4. Evaluate the comparative aspects of nutritional biochemistry and requirements		
a. Species-specific differences in metabolism		
b. Allometric considerations and cross-species variability in requirements		
c. Species-specific storage, transport, and activation of vitamins and minerals		
5. Describe the derivation and application of nutritional requirements		
a. Minimal vs. adequate intake vs. recommended allowance vs. safe upper limits		
b. Allometric and life-stage-specific requirements		
c. Derivation of requirements using NRC/AAFCO concepts and formulation implications		
d. Protein quality assessment		
B. Nutritional Physiology and Pathophysiology		15%
1. Compare and contrast the normal physiology across species and organ systems		
2. Describe nutrient-gene interactions		
a. Epigenetics and nutrigenomics concepts		
b. Breed- and species-specific gene-nutrient interactions		
c. Interaction of dietary components with gene expression		

3. Describe the impact of animal signalment on nutritional physiology and pathophysiology	
a. Life stage-specific physiology	
b. Species-specific differences	
c. Breed-specific differences	
d. Sex and neuter status	
4. Describe the pathophysiology of diet-induced and nutrient-sensitive diseases across species and organ systems	
a. Impact of disease on nutrient and energy metabolism	
b. Nutrients of concern for disease states	
5. Describe the regulation of appetite and control of food intake	
a. Central and peripheral appetite signaling and effect of hormones on appetite	
b. External factors influencing feeding behavior (e.g., palatability, stress, owner, environment)	
6. Describe the underlying pathophysiology of specific alterations in body composition	
a. Cachexia, sarcopenia, obesity	
b. Simple vs. stressed starvation	
c. Refeeding syndrome risk and electrolyte shifts	
7. Identify nutrient-drug associations in health and disease	
8. Explain the role of nutritional factors in immune function, wound healing, and infection risk	
C. Assessment of Individual/Group	15%
1. Recognize signalment- and activity-related nutritional considerations	
2. Develop a diagnostic plan	
3. Interpret clinical findings associated with diet-induced or nutrient-responsive conditions	
a. Diagnostics	
b. Methods for assessing body composition	
4. Identify candidates for assisted nutritional support	
5. Evaluate nutritional status and considerations for diseases/conditions	
D. Dietary Assessment and Feeding Practice	18%
1. Obtain accurate and complete diet/ration history	
2. Calculate energy, dry matter, and nutrient intake	
3. Assess adequacy of energy, dry matter, and nutrient intake relative to individual/group requirements	
4. Evaluate non-nutritive feed additives, supplements, and growth promotants	
5. Assess nutritional implications of food/feed forms	
6. Assess nutritional implications of environmental and husbandry factors	
7. Develop a plan to sample and analyze food/feed/water	
8. Interpret the results of food/feed/water laboratory and computer analyses	
a. Company-provided information	

b. Nutritional value of ingredients and effect of processing	
c. Food/feed analytical methods and their limitations	
9. Describe the implications of specific feeding management	
10. Assess economic considerations of food/feed forms	
11. Recognize food/feed and environmental exposure risks	
E. Develop a Nutritional Plan for the Individual/Group	18%
1. Prioritize the problem list and differential diagnoses	
2. Establish nutritional and management targets for diet/ration	
3. Formulate a diet/ration plan to meet identified targets	
4. Establish a monitoring program for individual/group	
5. Apply methods to manage animals with altered appetites	
a. Pharmacologic strategies	
b. Presentation and environment	
6. Manage assisted enteral nutrition feeding plans	
a. Feeding route	
b. Feeding plan	
c. Complication management	
7. Manage parenteral nutrition feeding plans	
a. Administration route	
b. Formulation and administration plan	
c. Complication management	
8. Communicate the feeding plan to relevant parties	
a. Strategies to optimize the implementation of and adherence to nutritional recommendations	
b. Techniques for addressing misconceptions	
F. Food/Feed and Supplement Production, Safety, Regulation, and Research Methods	14%
1. Evaluate food/feed manufacturing practices	
a. Processing effects on nutrient stability	
b. Quality control	
c. Food safety	
d. Risk assessment for feed contaminants	
e. Preservation, transport and storage	
f. Recall process	
2. Evaluate the procurement and quality of ingredients	
a. Bioavailability and digestibility	
b. Storage/handling techniques	
c. Soil quality, testing, and soil-nutrient interactions	
3. Interpret food/feed labeling information	
a. Regulatory requirements and terms	
b. Labeling claims and validation	

c. Conversion between as fed, dry matter, and energy basis
4. Evaluate the validity of nutrition information sources
5. Critique study design and scientific merit of nutrition research
6. Interpret animal feeding trials (e.g., nutritional adequacy, digestibility, palatability, metabolizable energy)
7. Evaluate nutritive and non-nutritive feed additives and supplements
a. Regulatory oversight
b. Evidence-based evaluation of supplements
c. Potential nutrient or drug interactions

APPENDIX D. COMPARISON BETWEEN OLD AND NEW TEST SPECIFICATIONS

Table D1. Domain Weight Comparison: 2023 vs. 2026 NUTRITION Test Specifications

Domain	Old Test Spec (2023)		New Test Spec (2026)
	Multiple Choice	Essay	
A. Nutritional Biochemistry and Requirements	30%	—	20%
B. Nutritional Physiology and Pathophysiology	20%	—	15%
C. Assessment of Individual/Group	10%	30%	15%
D. Dietary Assessment and Feeding Practice	12.5%	35%	18%
E. Develop a Nutritional Plan for the Individual/Group	12.5%	35%	18%
F. Food/Feed and Supplement Production, Safety, Regulation, and Research Methods	15%	—	14%
Total	100%	100%	100%

Note: In the 2023 test specifications, the exam consists of Multiple Choice and Essay sections with separate domain weights. Essay domains A–C correspond to Multiple Choice domains C–E. In the 2026 test specifications, domain weights are assigned to domains A–F without sectioning.

Table D2. Crosswalk Between 2023 and 2026 NUTRITION Test Specifications

Nutrition 2023 Test Specifications: Multiple Choice Items	ICS Code (2023)	Crosswalk New Test Specifications (2026)
A. Nutritional Biochemistry and Requirements	A	A
1. Demonstrate knowledge of definitions, classifications, metabolism, functions, and interactions of the following nutrients:	A.1	A.1
a. Carbohydrates including fiber	A.1.a	A.1.b
b. Lipids	A.1.b	A.1.c
c. Proteins and other nitrogen-containing compounds	A.1.c	A.1.a
d. Vitamins, vitamin-like, and other functional compounds	A.1.d	A.1.d
e. Minerals	A.1.e	A.1.e
f. Water	A.1.f	A.1.f
2. Demonstrate knowledge of energy and energetics including measurement methods	A.2	A.2
3. Demonstrate knowledge of nutritional aspects of acid-base regulation	A.3	A.3
4. Demonstrate knowledge of comparative aspects of nutritional biochemistry and requirements	A.4	A.4
5. Describe the derivation and application of nutritional requirements, including but not limited to:	A.5	A.5
a. Minimal vs. adequate vs. recommended vs. safe upper limits/maximum tolerable level vs. toxic	A.5.a	A.5.a
b. Allometry	A.5.b	A.5.b
6. Demonstrate knowledge of intake for an animal and its relationship to nutrient requirements, such as:	A.6	A.5 F.2
a. Bioavailability	A.6.a	A.5 F.2
B. Nutritional Physiology and Pathophysiology	B	B
1. Demonstrate knowledge of physiology	B.1	B.1
a. Alimentary/Digestive	B.1.a	B.1
b. Endocrine	B.1.b	B.1
c. Metabolic	B.1.c	B.1
d. Urinary and Renal	B.1.d	B.1
e. Immunologic	B.1.e	B.1
f. Cardiorespiratory	B.1.f	B.1
g. Musculoskeletal	B.1.g	B.1
h. Neoplastic	B.1.h	B.1
i. Pancreatic	B.1.i	B.1
j. Hepatic	B.1.j	B.1
k. Dermatological	B.1.k	B.1
l. Neurological/Cognitive	B.1.l	B.1
2. Demonstrate knowledge of nutrient-gene interactions, including but not limited to:	B.2	B.2

a. Epigenetic	B.2.a	B.2.a
b. Breed differences	B.2.b	B.2.b
3. Demonstrate knowledge of age-, life stage-, sex-, breed- or species-related nutritional physiology and pathophysiology	B.3	B.3
4. Demonstrate knowledge of the prevention and pathophysiology of diet-induced and nutrient sensitive diseases	B.4	B.4
5. Demonstrate knowledge of the regulation of appetite and control of food intake	B.5	B.5
6. Demonstrate knowledge of the causes and consequences of altered body composition (e.g., cachexia, sarcopenia, obesity) and methods of assessment	B.6	B.6 C.3.b
7. Demonstrate knowledge of the pathophysiology of starvation and catabolic disease	B.7	B.6
8. Demonstrate knowledge of nutrient-drug interactions	B.8	B.7
C. Assessment of Individual/Group	C	C
1. Recognize age-, life stage-, sex-, breed- or species-related susceptibility to nutritional problems	C.1	C.1
2. Interpret body weight, body condition, muscle mass, and changes over time	C.2	C.3
3. Recognize physical signs and interpret laboratory results of diet-induced or nutrient sensitive conditions, including but not limited to:	C.3	C.3
a. Imaging	C.3.a	C.3.a
b. Clinical pathology tests	C.3.b	C.3.a
4. Identify candidate for assisted nutritional support	C.4	C.4
a. Enteral	C.4.a	C.4
b. Parenteral	C.4.b	C.4
5. Ability to evaluate status and nutritional considerations of the following life stages:	C.5	C.5
a. Maintenance	C.5.a	C.5
b. Growth (pre-weaning and post-weaning)	C.5.b	C.5
c. Reproduction	C.5.c	C.5
d. Production/Lactation	C.5.d	C.5
e. Working/Performance	C.5.e	C.5
6. Evaluate status and nutritional considerations for the following diseases/conditions (individually or in combination):	C.6	C.5
a. Gastrointestinal	C.6.a	C.5
b. Endocrine	C.6.b	C.5
c. Metabolic	C.6.c	C.5
d. Urinary and Renal	C.6.d	C.5
e. Cardiorespiratory	C.6.e	C.5
f. Musculoskeletal	C.6.f	C.5
g. Dental	C.6.g	C.5

h. Neoplastic	C.6.h	C.5
i. Pancreatic	C.6.i	C.5
j. Hepatic	C.6.j	C.5
k. Dermatological	C.6.k	C.5
l. Neurological/Cognitive	C.6.l	C.5
m. Obesity	C.6.m	C.5
n. Starvation	C.6.n	C.5
o. Critical illness (e.g., trauma, sepsis, peri-operative)	C.6.o	C.5
D. Dietary Assessment and Feeding Practice	D	D
1. Obtain accurate and complete diet/ration history, including treats, supplements, and foods for medication administration	D.1	D.1
2. Determine energy, dry matter, and nutrient intake	D.2	D.2
3. Assess adequacy of energy, dry matter, and nutrient intake relative to individual/group requirements	D.3	D.3
4. Evaluate non-nutritive feed additives and growth promotants	D.4	D.4
5. Describe nutritional implications of food/feed forms, including but not limited to:	D.5	D.5
a. Forage forms	D.5.a	D.5
b. Commercial feed types (large animal and small animal)	D.5.b	D.5
c. Homemade	D.5.c	D.5
6. Assess nutritional implications of environmental factors, including but not limited to:	D.6	D.6
a. Season/Climate	D.6.a	D.6
b. Feed competition	D.6.b	D.6
c. Stress	D.6.c	D.6
d. Enrichment	D.6.d	D.6
7. Develop a species appropriate plan to sample and analyze food/feed/water, including but not limited to:	D.7	D.7
a. Nutrient content	D.7.a	D.7
b. Contaminants	D.7.b	D.7
c. Forage analysis	D.7.c	D.7
8. Interpret the results of food/feed/water laboratory analyses and formulation software	D.8	D.8
a. Evaluate company provided information (e.g., feed/ingredient labels, website information, product guides)	D.8.a	D.8.a
b. Evaluate nutritional value of ingredients and effect of processing	D.8.b	D.8.b
9. Demonstrate knowledge of implications of and indications for specific feeding practices, including but not limited to:	D.9	D.9
a. Frequency	D.9.a	D.9
b. Location	D.9.b	D.9
10. Assess relative nutritional and economic value of feeding systems, such as:	D.10	D.10
a. Nutrition modeling	D.10.a	D.10

11. Recognize diet related toxicosis, including but not limited to:	D.11	D.11
a. Toxic plants	D.11.a	D.11
b. Contaminants	D.11.b	D.11
c. Nutrients	D.11.c	D.11
d. Microbial	D.11.d	D.11
E. Develop a Nutritional Plan for the Individual/Group	E	E
1. Assess the animal's nutritional considerations compared to current diet/ration	E.1	D.3
2. Develop a prioritized nutritionally relevant problem list and differential diagnosis list	E.2	E.1
3. Develop a diagnostic plan and interpret results, including but not limited to:	E.3	C.2 C.3
a. Imaging	E.3.a	C.2 C.3
b. Clinical pathologic tests	E.3.b	C.2 C.3
4. Demonstrate knowledge of principles of ration/recipe formulation	E.4	E.2
5. Formulate an appropriate ration/recipe to meet specific considerations, including but not limited to:	E.5	E.3
a. Cost	E.5.a	E.3
b. Environmental sustainability	E.5.b	E.3
c. Ingredient restrictions	E.5.c	E.3
d. Ingredient accessibility	E.5.d	E.3
e. Palatability	E.5.e	E.3
6. Incorporate assessment findings to develop a feeding plan (e.g., diet, treats, supplements, medications, amounts, feeding method) based on prioritization of needs	E.6	E.2 E.3
7. Establish a monitoring program for individual/group	E.7	E.4
8. Evaluate individual/group response to feeding plan and modify as needed	E.8	E.4
9. Demonstrate knowledge of nutritional and pharmacological methods to manage animals with altered appetites	E.9	E.5.a
10. Demonstrate knowledge of assisted feeding tube selection, placement technique, management, and potential complications, including specific dietary recommendations and fluid administration	E.10	E.6.a E.6.b E.6.c
11. Demonstrate knowledge of catheter selection, formulation, institution, and monitoring of parenteral nutrition and fluid administration	E.11	E.7.a E.7.b E.7.c
12. Describe characteristics of the components used in parenteral nutrition	E.12	E.7.b
13. Communicate the feeding plan to relevant parties	E.13	E.8
a. Provide rationale for the feeding plan	E.13.a	
b. Answer feeding plan questions	E.13.b	E.8.a

c. Utilize techniques to increase client's adherence to feeding plan or nutritional recommendations	E.13.c	E.8.a
d. Address misconceptions regarding nutrition, diets, and ingredients	E.13.d	E.8.b
F. Food/Feed and Supplement Production, Safety, Regulation, and Research Methods	F	F
1. Demonstrate knowledge of principles of manufacturing and food science, including but not limited to:	F.1	F.1
a. Processing	F.1.a	F.1.a
b. Quality control	F.1.b	F.1.b
c. Safety	F.1.c	F.1.c
d. Preservatives	F.1.d	F.1.e
2. Demonstrate knowledge of the procurement and handling of ingredients as sources of nutrients, including but not limited to:	F.2	F.2
a. Bioavailability	F.2.a	F.2.a
b. Digestibility	F.2.b	F.2.a
c. Storage/handling techniques	F.2.c	F.2.b
d. Soil quality as determined by soil testing	F.2.d	F.2.c
3. Demonstrate knowledge of sustainability and environmental implications of feeding practices	F.3	
4. Demonstrate knowledge of safe storage and analysis procedures for contamination	F.4	F.2.b F.1.e F.1.d
5. Demonstrate knowledge of regulations and labeling	F.5	F.3.a F.3.b F.3.c
6. Evaluate quality of nutritional information from various sources, including but not limited to:	F.6	F.4
a. Internet	F.6.a	F.4
b. Marketing claims	F.6.b	F.4
c. Scientific literature	F.6.c	F.4
d. Product guides	F.6.d	F.4
7. Evaluate study design and appropriate application of statistics/epidemiology	F.7	F.5
8. Demonstrate knowledge of food/feed analytical methods and their limitations	F.8	D.8.c