

Instructions for the Writing and Evaluation of ACVN Case Reports

The ACVN® reserves the right to modify, update and make changes to the Candidate instructions and guidelines at any time at the approval of the Executive Board; however, the information on the ACVN web site as of February 1st will be the guide for the Credentials Application and Case Reports in the same year. Three Case Reports must be found acceptable according to Credentials Committee criteria in order to be declared eligible for the certifying ACVN examination (Bylaws section 2.b.4). There are two types of case reports: Preliminary Case Reports and those Case Reports submitted as part of a Credentials Application.

A candidate may submit one case report one time ahead of their first Credentials Application and this shall be called a Preliminary Case Report. Preliminary case reports are only accepted from Candidates that have not previously submitted an ACVN Credentials Application. Additionally, a candidate may only submit one Preliminary Case Report one time regardless of when the first Credentials Application is subsequently submitted. If the Preliminary Case Report achieves a score greater than 60%, then the report will count as one of the required three accepted Case Reports in a Credentials Application. If the Preliminary Case Report fails, the report may be edited and resubmitted one time with a Credentials Application. A Preliminary Case Report does not have to be resubmitted in any Credentials Application. A maximum of three Cases Reports will be reviewed per Credentials Application. The Credentials Committee will compile individual reviewer comments into a Summary of Reviewer Comments for all Preliminary Case Reports and average rubric scores for all failed Credential Application Case Reports, which is then returned to the Candidate author through the ACVN Secretary.

The ACVN mentors have important roles in helping their resident meet the Case Report requirement. An ACVN mentor should:

1. continue to oversee the Candidate in the nutritional management of the patient,
2. advise on the suitability of a given case as an ACVN Case Report,
3. provide direction in the writing of a peer reviewed scientific manuscript,
4. review the Summary of Reviewer Comments provided by the ACVN Credentials Committee, and
5. review case report(s) with the Candidate after the ACVN Credentials Committee has finalized their decision on the acceptability of the report(s).

1. The purpose of case reports is to demonstrate:

- a. The Candidate has been working in veterinary nutrition and is prepared to take the credentialing examination.
- b. The Candidate's ability to clearly and effectively communicate nutritionally related observations and data to colleagues in a clear and organized written scientific format.
- c. The Candidate's ability to apply clinical reasoning in a case-based format, including documentation to justify or defend their chosen nutritional approach with appropriate references and explanations in cases with major nutritional component(s) beyond that expected of a graduated veterinarian.
- d. The Candidate has personal experience and competency in the application of accepted nutritional principles in the diagnosis, treatment, and prevention of animal disease, as demonstrated by comprehensive written narratives of three different problems requiring nutritional intervention in individual animals, herds or animal populations.
- e. Each case report should include:
 - i. Nutritional assessment of the patient(s) before and after interventions
 - ii. Developing and implementing a well-designed nutritional plan
 - iii. Application of major nutritional principles
 - iv. Relating nutritional principles to relevant nutrition literature
 - v. Rationale for the application (or not) of relevant nutritional strategies
 - vi. Appropriate monitoring, re-assessment and modification to the nutritional plan as needed

2. Selection of cases

- a. Cases must demonstrate competency in veterinary nutrition beyond that expected of a graduated veterinarian. See 'Expected Skills of ACVN Diplomates' in the [Training Program Information Guide & Expected Skills](#) at www.ACVN.org. These reports should emphasize the dietary and nutritional, and less the medical and surgical, aspects of a clinical case. The reports are not intended to demonstrate the Candidate's ability to review scientific literature or to do laboratory research, even if it has direct application to veterinary nutrition.

b. Cases selected should reflect the species track that the candidate has elected for examination as defined by the Training Program Information Guide and Expected Skills.

- Tracks: ‘Small’ animal track covers those species commonly seen in a small animal clinic (i.e., dogs (all members of the *Canis* genus), cats (including the *Panthera* genus), ferrets, pot-bellied pigs, birds, rodents, rabbits, and reptiles). ‘Large’ animal track covers those species commonly seen in a large animal clinic or ambulatory practice (i.e., cattle, pigs, horses, small ruminants, camelids, and wildlife (not covered in the ‘Small’ animal grouping). ‘Comparative’ species track covers both ‘large’ and ‘small’ categories.

Candidates electing to be examined in the comparative track should include at least one small animal and at least one large animal case. Telecommunications used in follow-up assessments are acceptable when the methods of communication are clearly stated, e.g., follow-up conducted by phone with the owner or by email with referring veterinarian (rDVM).

c. Teleconsultation is the entire nutritional management of a patient using electronic means of assessment and communication, i.e., the Candidate never sees the patient in person. Teleconsultation cases as an ACVN case report are inherently more challenging because the candidate is not able to demonstrate personal competency in the initial and follow-up nutritional assessments of the animal(s) (section 1.e.i above) because both assessments will be entirely dependent on another’s (rDVM, client) observations. Cases in which the candidate cannot perform an in-person initial and at least one follow-up physical examination are potentially weakened although not automatically an inappropriate case for an ACVN case report. Such a case conducted entirely through telecommunication must provide information that is thorough, accurate and sufficient in all aspects of case management, i.e., a complete physical examination, dietary history, laboratory work up for the initial and all follow-up evaluations. All the necessary information as if compiled during an in-person visit must be obtained in order to be a suitable case to report. Conversely a case report lacking essential information is not justifiable in teleconsults.

- d. Cases selected must demonstrate the Candidate's ability to manage at least three different problems requiring nutritional intervention in individual animals, herds or populations. For example:
- A case of cardiomyopathy due to selenium deficiency in lambs and another in dogs: one would not be accepted because the etiopathogenesis of selenium deficiency is the same.
 - Two parenteral nutrition (PN) cases in which both lacked a functioning small bowel; one of them would not be acceptable, even if used in different species with different disease processes because the nutritional rationale is the same.
 - Teleconsulting is a skill to be learned during resident training; however in the best interest of the Candidate, only 2 of the final 3 accepted case reports from a Candidate may be managed entirely by electronic mediums.
- e. The nutritional components of the cases must demonstrate the Candidate's thoroughness, logic and accuracy equally in nutritional assessment, intervention, and monitoring of the case.
- f. The nutritional aspects of the report must reflect the work of the Candidate although others may have been responsible for other aspects of the case, i.e., internist, surgeon, etc. The report must reflect the Candidate's specific input and thought processes on the case. No one may help the candidate write the report by reading, reviewing or editing the report. The report is to be the sole work of the Candidate, although on-going case management should be under the guidance of an ACVN mentor.
- Exception: If the option for Preliminary Case Reports is offered, the Credentials Committee will provide feedback to the candidate concerning one Preliminary Case Report which may then subsequently be revised by only the Candidate and resubmitted one time as part of a Credentials Application. The Preliminary Case Report option is only available to candidates submitting their Credentials Application for the first time, i.e., a once in a lifetime opportunity.
- g. The Candidate is expected to be primarily responsible, under mentor guidance, for the nutritional management of the case while other responsibilities for the case may remain with another veterinarian or veterinary specialist. The Candidate is expected to have an understanding of all aspects of the case, and should clearly point out those case

decisions that were made by another veterinarian including diagnostic test, nutritional management and treatments before receiving the case. The Candidate should discuss previous nutritional management of the case in terms of whether that management was appropriate or not and why. The Candidate's role in case management versus that of the attending medical or surgical care providers should be clearly delineated. It is still expected that the writing of the report, regardless of other veterinarians' involvement, will be original and entirely that of the Candidate's work.

- h. Previously published reports cannot be used to fulfill this requirement. However there are no restrictions on submitting the report for publication after the Credentials Committee's review has been completed.
- i. For more information on case selection, see Addendum to this document: General Guide to Selecting a Case and Report Writing.

3. Style and format of case reports:

- a. The case report is to be written in English using a third person past tense narrative style, with attention given to editorial detail as if the work was to be submitted for a peer-reviewed publication using professional language and tone as if speaking to a colleague publically.
- b. The case report is to be constructed so that major emphasis is given to the rationale and justification for the diagnostic and therapeutic nutritional procedures. The narrative must be succinct, but give adequate consideration to differential diagnoses, alternative courses of investigation and therapy, and justification for the course of action selected.
- c. Care must be taken to keep the reports anonymous. The names of persons or animals, clinics or hospitals, places (city, state, and country), case numbers and any other identifying marks in the title, text, tables, figures and any other supporting material must not be used.
- d. Format of Case Report:
 - i. The total number of pages in the case report must not exceed 14 (including the title page) and all pages must be single-sided text, page numbered in the upper right hand corner within the top margin (header) using 'page # of # ', e.g., title page is marked "Page 1 of 14" or fewer. All lines of text (page 1 to 8) must be

- sequentially numbered, i.e., line numbering does not restart on each new page.
Reference list, tables and figure pages need not be line numbered.
- ii. Organization within the 14 pages is in this order:
 1. Title page
 2. Body of Text (max 7 pages with footnotes)
 3. Reference citations in the order as first mentioned in the text
 4. Tables and/or Figures numbered in the order as first mentioned in the text
 - iii. Title page includes the case report title and a case summary of less than 100 words using line spacing of 1.5, Times New Roman font size 12, color black. The case title font style is bold and centered justified. The case summary font style is regular and left justified within top, bottom and side margins of 2.5 cm (one inch). This page is to be marked as the first page.
 - iv. Body of Text begins on page two and is limited to a total seven pages of single sided text using line spacing of 1.5, Times New Roman font size 12, font style regular, color black, left justified with margins of 2.5 cm (one inch) at top, bottom and sides. The text is to be written in English and in the 3rd person past tense.
 - Paragraphs must be separated by subheadings, a blank line or a 5 space indentation.
 - All units of weight, volume, temperature and length must use the metric system, and dates written as month/day/year.
 - Grammar and spelling are expected to be flawless.
 - Italics are used for bacterial and viral taxa at the level of family and below. All bacterial and many viral genes are italicized. Serovars of *Salmonella enterica* are not italicized.
 - Objective superlatives are permissible, e.g., widest, smallest; however, the use of exaggerated or hyperbolic expressions using subjective adverbs, e.g., severely or extremely, are discouraged in scientific writing. Adjectives such as ‘moderate’ or ‘severe’ as part of a published grading system (muscle condition scores) are acceptable.
 - Refrain from using pronouns (personal, subjective, objective, singular or plural) and their possessive versions, e.g., I, you, he, his, its, yours, theirs, etc.

If you need grammatical help, consider <http://www.grammar-monster.com>.

- The candidate may refer to him/herself as the “Candidate” or “Resident”
 - Numbers less than 10 in the text (not in tables for figures) are written as words unless pertaining to time e.g., two diets were mixed and fed on day 3; whereas numbers ≥ 10 are written as numerals, e.g., 1046 kcals/day. Calculations are in brackets [] and concentrations are in parentheses ().
 - Abbreviations and acronyms must be fully spelled out at first mention within the text and only if to be used subsequently, e.g., parenteral nutrition (PN)
 - Use standardized abbreviations found in Standard Abbreviations for Veterinary Medical Records, 3rd ed, American Animal Hospital Association. 2010. ISBN: 978-1-58326-144-6.
- v. References, Footnotes, Tables and Figures are encouraged to improve the clarity of the report using single-sided text. Each table and figure must be intelligible without reference to the text. Appendices are by definition addendums, supplemental or adjunct information containing additional non-essential information and therefore only should be used if space is available and the information is helpful. Therefore, appendices should not contain essential information or that needed for a complete understanding of the report.
- e. **Formatting for Footnotes, References, Tables and Figures:**
- i. **Footnotes** are used for ancillary information at the bottom of the same page at first mention of:
 - Abstracts, presentations, posters, online databases, theses/dissertations, and computer software (statistical, ration balancing, etc).
 - ^e Spear, JK. Development of the oral microbiome in kittens. Poster session at: Annual Companion Animal Nutrition Summit: 2017 May 4-6; Vancouver, Canada
 - ^f Agricultural Software Consultants Inc. MixitWin. Version10. San Diego, CA. 2017. Available from: <http://www.agriculturalsoftwareconsultants.com/mixit-win>
 - Personal communications: note person and date.
 - ^b Pfizer Veterinary Representative Dr. A Smith by phone on April 1, 2017
 - Products: pet food, drugs, laboratory test and equipment, if needed.
 - ^g Hill’s Prescription Diet® w/d Canine with Chicken, dry, Hill’s Pet Nutrition, Inc, Topeka, KS. Providing 2.921 kcal/g as fed with 58g protein/Mcal, 2014 product guide
 - ^h Pimobendan 5 mg tablet, Boehringer Ingelheim, St. Joseph, MO

Footnotes are referenced with superscripted lowercase letters in the text only at first mention in the text and then listed alphabetically at the bottom of the same page.

The footnote text contains no less than 1.15 line spacing within an item and between footnotes using Times New Roman font size no less than 11, font style regular, color black, left justified within page margins and all information must be legible. Subsequent line indentation of 0.2” improves readability.

^aMighty Fast Track Horse Sweet feed, St. Louis, MO with 4958 kcal/kg DM, 24.7% protein and 35.8% fat

If more than 26 footnotes are required, continue the sequence with double letters, e.g., y, z, aa, bb. For pet food products and drugs, provide complete information in the footnote, including manufacturer’s name and location, i.e., city, state, and country [if other than the United States]. For pet food products, consider reporting the product guide date to timestamp the nutrient profile and ingredients as products profiles can change over time. Additionally for drugs provide generic or brand and generic names and concentrations. Equipment should be included in the footnote only if essential to the outcome of the case. Footnote formatting within tables (iii) and figures (iv) use symbols: see below for specifics.

- ii. **References:** Citing all the literature that covers a particular subject is not recommended. Primary literature sources should be used where possible; however, when information is general knowledge or where there is no evidence but only expert opinion or consensus of opinion, e.g., a nutrient concentration for which no primary definitive study is available in the species of interest, the citation of chapters or review articles is allowable. Citation list contains no less than 1.15 line spacing within an item and between notes using Times New Roman font size no less than 11, font style regular, color black, left justified within page margins and all information must be legible. Subsequent line indentation of 0.2” improves readability. Use the Vancouver citation method where citations are referenced sequentially using superscripted numbers at the end of the sentence within the text after the sentence period, e.g., ... glycemic control.^{2,3,4} The full citation is to be listed at the end of the case report in order of numbered appearance using the

National Library of Medicine rules for referencing style. Rules can be found at <http://www.nlm.nih.gov/citingmedicine> with details and very good examples for all types of materials (printed, unpublished, electronic, appendixes). The print version is: Patrias K. Citing medicine: the NLM Page 8 of 18 November 27, 2017 style guide for authors, editors, and publishers [Internet]. 2nd ed. Wending DL, technical editor. Bethesda (MD): National Library of Medicine (US); 2007 [updated 2015 Oct 2; cited 2017 Aug, 1]. All the information used in the example citation may not be available for a particular citation as suggested in Citing Medicine. The point is to provide all available information about the citation such that one could locate the referenced material.

- iii. **Tables** are generally understood as compilations of single data points fixed in time in the form of rows and columns. All tables must be identified with an Arabic numeral and title; using ‘Table #x’ by first order of appearance in the text, e.g., ‘The serum biochemistry data (Table #1) was assessed as’. Table title font style is bold whereas the font style of the table body is routinely regular, although a bold font style within the body may be used judiciously for distinctions, with a line spacing of no less than 1.15 using Times New Roman font size no less than 11, color black. Text within the table must be readable, e.g., Case Report Grading Rubric can be viewed at www.acvn.org. Suggestion: create the table(s) in a spreadsheet program, e.g. MS Excel where data processing and table formatting is easy and then copy/paste into MS Word and save those files for future edits. Tables must be clearly identified, referred to and assessed in the text, i.e., do not include extraneous tables. Shading or background coloring is not advisable because distinctions will be obscured when printed in black/white. In reporting data, consistency is key. Use the same unit of measurement within the same parameter, e.g., do use both mg/dl and umol/L for creatinine; convert one if two different labs were used or use a different line for each lab in the table. The number of decimal places implies precision of the measurement, and so use the same number of decimal places as in the lab report, e.g., specific gravities are reported as 1. xxx whereas albumins are 4.x but BUN is a whole number, e.g., 16. A reviewer should be able to understand the table without reading the text of the report so all

abbreviations should be defined in a readable footnote below the table. Footnotes (if needed) within a table use superscripted symbols [* , †, ‡, \$, **, ††, ‡‡, \$\$, ***,] listed in order of occurrence (read left to right then top to bottom) in a legend immediately below the table. Footnote symbols are restarted in each new table.

- iv. **Figures** are generally understood to be illustrations of data;
- A chart is a table of averages by categories (ration nutrient profiles).
 - A graph contains two axis showing changes over a variable (time).
 - A diagram is a schematic of a structure or process (calculations).

All figures must be identified with an Arabic numeral and title; using ‘Fig # ’ sequentially in the order they first appear in the text, e.g., ‘The blood glucose curve (Fig #1) was assessed as’. Figure title font style is bold whereas the font style of the body is regular with a line spacing of no less than 1.15 using Times New Roman font size no less than 11, color black. Suggestion: create the figure(s) in a spreadsheet program, e.g. MS Excel for data processing or a draw program to format figures and then copy/paste into MS Word and save those files for future edits. Figures must be clearly identified, referred to and assessed in the text, i.e., do not include extraneous figures. Shading or background coloring is not advisable because distinctions will be obscured when printed in black/white. A reviewer should be able to understand the figure without reading the text of the report so all abbreviations should be defined with a readable footnote below the figure.

Footnotes (if needed) within a figure (charts, graphs or diagrams) use superscripted symbols [* , †, ‡, \$, **, ††, ‡‡, \$\$, ***,] listed in order of occurrence (read left to right then top to bottom) in a legend immediately below the figure. Footnote symbols are restarted in each new figure.

- v. If more help is needed, consider a Writing Lab or similar at a university or online: <https://owl.english.purdue.edu/owl>, <https://writing.colostate.edu> or <https://writing.wisc.edu/Handbook/ScienceReport.html>. Any formatting issues not addressed in these instructions or by a supervising mentor, may be queried to the Credentials Committee through an ACVN mentor.

- f. All case reports must be submitted electronically as PDF files. Reports not meeting these formatting criteria will not be further evaluated but returned to the Candidate identifying the formatting errors.

4. Case report body of text uses the Iterative Process of Veterinary Clinical Nutrition:

To determine the role of nutrition under various veterinary circumstances, a systematic method is employed to ensure that all appropriate facets of nutrition are assessed. There are three aspects to be assessed in every case:

- Animal (any and all species are included here except humans) factors of one or a group (herd, flock, etc),
- Diet (feed, ration, food, water, etc.) factors, and
- Feeding Management: the method(s) of providing/delivering nutrition to the animal(s).



This process (and hence the trademarked logo) involves a repeating systemic evaluation of all three aspects affecting the nutritional status of a given animal(s) as often or as few times as needed.

Therefore case report text should contain the following information:

- a. Assessment of the animal(s) at the time of the candidate's involvement in the case.
 - Describe:
 - Signalment including herd status, if applicable
 - Pertinent history, including complete diet/food/ration and changes in body weight (BW), body condition score (BCS), muscle condition score (MCS) if available for the species and production data if applicable to the species
 - Clinical signs referable to the nutritional problem(s)
 - Physical exam at the time of the candidate's involvement in the case
 - Laboratory and other clinical test results which are pertinent to the nutritional management
 - Discuss:
 - Problem List/Diagnosis/Differential List
 - Summarize etiopathogenesis of nutritional problem(s)
 - Specific risk factors for this case or nutritional implications of disease or injury where applicable
 - Assessment of nutrient intakes, in particular; energy and nutrients of concern particular to the case

- Other pertinent dietary factors in the case, e.g., ingredients, method of feeding or specific factors affecting intake, e.g., weather, season, animal competition, palatability, texture, etc.
- b. Assessment of the nutritional intake at the time of the candidate's involvement in the case and throughout the implementation of the nutritional plan. An accurate description of the nutrient profile including water and energy intakes, ingredients and feeding method is needed at all noteworthy time points of the case.
- Describe and assess diet and nutrient intake relative to the nutritional adequacy for that animal(s).
 - Describe and discuss feeding methods
- c. Nutritional Recommendations. Describe and justify nutritional and (or) ingredient recommendations including, when appropriate:
- Nutrition products, foods, feeds or rations
 - Illustrate calculations within the text, footnote or figure to demonstrate competency in nutritional formulation:
 - Demonstrate energy equation(s) with citation(s), e.g., MER of 1650 kcal/d using the formula: $MER = (BW)^{0.93} \times 62.5$ was fed.³
 - Demonstrate caloric density calculation of a tube mixture, PN solution or when more than one product or feeds are fed in combination, e.g., Caloric density of final tube slurry was 1.02 kcal/ml after combining 100 g of Diet A containing 3.978 kcal/100 g as fed and 290 ml of water [397.8 kcal/390 ml total mixture].
 - State complete food/feed dosages, e.g., Owners were instructed to feed 477 g/d [MER of 1650 kcal / (3.456 kcal/g)] of Diet B^d q12h for 4 days.
 - State nutrient concentrations (not 'levels'), e.g., 'protein was reduced to 2 g/Mcal because' versus a vague consensus of opinions, e.g., 'a low protein diet was recommended'.
 - State daily intake of key nutrients of concern, and compare to an appropriate standard (NRC, AAFCO, FEDIAF or citation) e.g., Zinc intake was set at 120% of NRC 2007 because⁷
 - Feeding management or method and schedules including diet transitions
 - Expected outcome and monitored parameters

- Rationale for monitoring those parameters
 - Nutritional implications of concurrent medical or surgical therapies
 - Prognosis with regard to nutritional problem(s)
- d. Re-assessment/Outcome/Follow-up. Describe and explain how the data obtained during re-assessments does/does not support the nutritional recommendations made in part 4c. including, when appropriate:
- Clinical signs (new or persistent) referable to the nutritional problem(s)
 - Physical exam findings including BW, BCS and MCS
 - Production data
 - Laboratory and other clinical test results
 - Justify any modifications to the nutritional plan
 - Repeat this re-assessment step as often as is appropriate for the case to demonstrate the candidate's ability as a clinical nutritionist, e.g., every 6 hours for a critically ill patient vs. every 30 days for an intermediate term goal (weight loss) vs. every 6 mos for a long term goal (urolith prevention).
- e. Consider using the following to accurately and fully describe and defend the management of the case:
- Nutrient profiles of products, foods, feed and (or) rations
 - Literature citations using primary citations on pivotal key points
 - Use review articles or chapters on consensus statements
 - Ingredients or feedstuffs attributes (positive and/or negative)
 - Changes in clinical signs (subjective, objective)
 - Changes in clinical laboratory data
 - Feeding limitations in hospital, home or farm
 - Financial constraints, practicality and/or essentiality
 - If not fed per os, fully describe tube, catheter and/or parenteral feeding methods which includes stating tube or catheter type, material and size
 - Describe feed/ration delivery systems which includes equipment or software
 - Computer ration balancing or formulating programs

- Published guidelines (BCS, IRIS)* or Consensus statements (ISFM Consensus Guidelines)
- Production, performance and/or economic benefit of the recommendations

5. Evaluation of case reports:

- a. All case reports will be evaluated in a blinded fashion by at least 5 members of the Credentials Committee using a pass point of greater than 60% of total possible points.
- b. Case reports containing major formatting errors, e.g., >14 pages, incorrect font type or size/margins/line spacing, and/or failure to maintain anonymity will be automatically rejected and returned to the candidate without a Credentials Committee review. The documented formatting errors will be conveyed to the candidate. Case reports rejected outright for formatting errors only and not reviewed by the Credentials Committee members may be resubmitted in a following year.
- c. Case Report Grading Rubric can be viewed at www.acvn.org.
- d. Candidates achieving a passing grade are informed in writing that the case was acceptable and reviewer comments are not returned to the Candidate.
- e. A Summary of Reviewer Comments for all preliminary case reports and any failing case report submitted as part of a Credentials Application will be compiled and returned to the Candidate.
- f. Once a case report has been reviewed by the Credentials Committee and failed, that case cannot be resubmitted in subsequent years. The only exception is the one Preliminary Case Report submitted prior to a candidate's first Credentials Application. Only one preliminary case report is allowed per Candidate regardless of whether that case is accepted or not, and regardless of when the first Credentials Application is submitted.

* Body Condition scoring; International Renal Interest Society; International Society of Feline Medicine

Addendum: General Guide to Selecting a Case and Report Writing

Case Selection:

1. Throughout your clinical experience, you should be keeping track of 4-6 cases as potential case reports. Keep running notes on all of them as the case progresses. Discard and replace cases that turn out to lack sufficient complexity, do not demonstrate your abilities as a clinical nutritionist or have ample follow-up. **Begin writing the reports at least 6 months ahead of due date with no regard to the page limit.** Set them aside after a writing session and come back to them day(s) later. You will find many mistakes and gain perspective on the case and find grammatical errors when you read it out loud after a day or two respite. As you repeatedly edit and refine the report to be succinct, the space limitations will become plausible.
2. Make sure the focus is on nutrition. Many cases involve complicated medical issues with long histories, and while it is important to introduce the case including previous medical management, the reviewers are most interested in *your* contribution and making sure you *understand* the nutritional management of the case. For example:
 - Clearly state when and how you became involved in the case and distinguish your decisions from those of other clinician's involved, particularly dietary recommendation made by others.
 - Avoid long non-essential narratives on case background and history, e.g., do not use three out of seven pages laying out the case before you were involved unless essential to understanding the case. Provide the history in an accurate, succinct narrative providing only the pertinent information. **An excellent case report balances discussions of pathophysiology of disease, rationale for nutritional interventions, and medical management.**
3. Choose cases where **you are involved early enough in the process to have an impact** on the case outcome. This pitfall occurs most commonly in assisted feeding cases. For example:
 - The medicine clinician places a PEG tube in a dog with esophageal stricture and initiates enteral feeding. Two weeks later you are consulted because the patient is losing weight. You assess the calories being fed and decide to increase caloric intake. Two weeks later the dog has gained back the weight and is doing well. In this example, your nutritional involvement was minor and does not demonstrate your abilities as a nutrition specialist.
4. Choose cases that **demonstrate a high level of nutritional intervention and your knowledge** that can be well described and complete in seven pages of text. For example:
 - A case of a dog in chronic renal disease with a history of pancreatitis that presents for extensive small bowel resection secondary to foreign body ingestion is probably too complicated to thoroughly discuss in the space limitations of an ACVN case report.
 - A weight loss plan in an otherwise uncomplicated obese dog is probably too simplistic to demonstrate your clinical nutrition abilities. You should not select a case that could have been managed equally as well by a graduated veterinarian with no advance

nutritional training. See Expected Skills of ACVN Diplomates versus Nutrition-Related Competencies of Veterinarians at www.ACVN.org.

You cannot demonstrate your abilities as a clinical nutritionist if your key recommendations were not implemented, so avoid cases where the primary clinician repeatedly disregards your recommendations. It is common, however, for some nutritional recommendations to be altered to a minor degree. For example:

- In a parenteral nutrition (PN) case at high risk for refeeding syndrome, you recommend checking electrolytes 24 hours after initiating PN. The clinician managing the case elected not to check electrolytes until 48 hours due to financial concerns of the owner.

In such a case, you should *state* your recommendations and *explain* your reasoning for that recommendation, and then why your recommendations were not followed, and how you worked around that limitation.

5. Use cases where key diagnostic testing has been performed, and avoid cases where critical diagnostics were not performed. Such situations may be the reality of clinical practice but that makes the case unsuitable for an ACVN report. Nutritional management is much more difficult to defend and re-assess if the diagnosis has not been made early in the report. Always include a differential or rule out list if applicable because it is unrealistic in most cases to run every test desired due common (time, money, access, practicality, risks) constraints. **The better cases are those in which both a minimum database (CBC, Serum BioChem, UA) and key diagnostics were performed initially and at follow-up time points.** If there were additional tests that should have been performed to confirm the diagnosis, consider another case or attempt to justify the absence of those test results. For example:

- In a case of chronic gastrointestinal disease, it important to have a definitive diagnosis with an intestinal biopsy and/or endoscopic evaluation upon which to formulate a nutritional plan.
- In a case of thiamine deficiency, it is important to measure RBC transketolase activity in the patient or have a pathognomonic clinical sign or result, i.e., a sign or symptom that is so characteristic of a disease that it can be used to make a diagnosis, e.g., night blindness in a herd.
- In a case of chronic renal disease, it may have been prudent to perform ultrasound of the kidneys to rule out certain causes of renal dysfunction, but constraints may have precluded performing that test. In such a case, state that you would have liked to have an ultrasound evaluation and why/how that information would have made a difference to your plan, i.e. rule out renal tumors, renal pelvic stones, ureter blockage, etc.

If you have a case in which the diagnosis is not confirmed, but highly suspected, proceed with caution and be sure to include a list of differentials and justify the top differential. For example:

- A definitive diagnosis of pancreatitis is difficult without a biopsy but that is rarely practical. Be sure all possible tests were completed, clinical signs and follow-up data

continue to support the top differential of pancreatitis.

The absence of key diagnostics testing cannot be justified by explaining that ‘tests were requested by the candidate but not performed’ or ‘limited by lack of finances, time or page space’. Incomplete laboratory data or diagnostic testing ultimately compromises the nutritional care and weakens the case presentation and, hence, makes the case unsuitable for an ACVN report.

Case Write-up:

6. **Diet[†] history is essential to case reports.** For example:

- In a case where you are designing a homemade diet for inflammatory bowel disease and suspect food allergy, you must have a diet history that justifies your novel ingredients.
- Consider the case of a healthy adult dog that was involved in a car accident and requires a nasoesophageal feeding tube but the owner was also hospitalized and is not immediately available. It is not critical to have a complete diet history initially although you must explain the circumstances and obtain the diet history at some point before writing up the report.
- If you chose to use Hill’s[®] g/d canned for a case of chronic kidney disease with pancreatitis, discuss the specific attributes of that product and why you chose those attributes. If there were negative attributes to using the same product but it was the best option, explain the dietary features that were contraindicated and justify your plan. In this same case, perhaps the phosphorous level in this product is higher than that recommended for chronic kidney disease stage 3 or 4, but relative to the dog’s diet history, the phosphorous level in this product was lower and the dog was in stage 2 kidney disease.

7. **State the standard of nutritional reference**, e.g., AAFCO 2016, FEDIAF 2017, Equine NRC 2007, etc., used to determine the nutrient intake historically and going forward as adequate, deficient or excessive, and state why this standard was selected. It is illustrative to include the extent (%) of any deficiencies or excesses.

- Calcium intake was 4x the recommended maximum intake for 3 month old foals. Feeding method or feeding management must also be included in the diet history and with as much detail as possible; name of the food/feed, amount, frequency and method of intake if other than per os. Note: use of SID, BID and QID are no longer allowed.
- Purina[®] CN, 35 ml, q4 h by PEG tube
- Purina Mills[®] Enrich Supplement, 454 g q24 hrs.

You should not depend on the manufacturer’s recommendations for a particular disease/condition. Be sure to justify your selection based on the nutrient profile and the nutrients of concern in your patient(s). Simply stating a product has “passed AAFCO” does

[†] ‘Diet’ is food/feed, water and other consumed edibles as defined by the ACVN e.g., treats, table food, supplements, rawhides, dental products, foods used to administer medications.

not relieve a nutritionist from checking and documenting specific intakes of the key nutrients of concern for their patient.

8. **Writing should have a professional tone.** Refrain from using unprofessional language, medical slang, local jargon; none of which would be accepted by an editor of a scientific publication. All abbreviations (acronyms) although commonly used must be spelled out at first use; however, do not make up your own abbreviations in an effort to save space. See Body of Text instructions (pg 6 3.d.iv) for acceptable abbreviations.
 - ‘go home orders’ are in fact ‘patient discharge orders’.
 - Know the difference between *id est* (i.e.,) and *exempli gratia* (e.g.,).
9. Be sure to collect the **complete nutrient profile of any foods, feeds or products at the time you are developing the nutritional plan** because product nutrient profiles and ingredients change over time and may not be available later when writing up the case. **Consider a case timeline** relative to the candidate’s involvement or first hospital admission. Use a consistent timeline within the text that is carried over to tables and figures.
 - Day 1 is the first day of candidate involvement or first appointment visit
 - If you use “5 days post ICU admission” in the text, do not use a date (12/16/2016) in a table showing blood work.
 - Consider dates to timestamp the product guides, conversations with the manufacturer and testing methods as these also change over time.
10. Space is precious. **Make good use of figures and tables to decrease lengthy explanations** in the text, but discuss in the text how the data in the table or figure influenced your initial and/or subsequent nutritional plans and address all abnormal values presented.
 - Pertinent laboratory data are efficiently presented in tabular form in chronological order with normal reference ranges/intervals and units in the first column or row. Abbreviations of lab tests (GGT, ALT, iCa) must be defined in figure or table footnotes. Help the reviewer find the abnormal lab values (if present) by highlighting, e.g., bolding, adding an “H” or “L” or asterisk abnormal values. Be sure to discuss trends in your data, and do not ignore abnormal data in tables or figures. Explain all blank or missing data in the table, i.e., not available, no requirement or not done, etc.
 - Consider a graph to demonstrate change over time, e.g., body weight or changes in key laboratory parameters such as blood glucose, albumin or BUN but time line and values must be readable and correctly displayed, i.e., time unit must be consistent.
 - Photos are rarely needed unless essential to making a particular point, i.e., including the radiograph of gastric torsion is not essential to the diagnosis, but if included, be sure to discuss in the text and maintain anonymity.
 - Radiology, ultrasound, EKG/ECG, and biopsy results can be efficiently and succinctly be reported in the text. Data or report summaries as images are rarely needed to make the same point, but if included, be sure to discuss in the text and maintain anonymity.
 - Published figures (tables, charts and diagrams) should not be included in your report. You

can reference the body condition scoring or fecal scoring charts, etc. in the text. Images are not needed and would not be accepted by an editor of a scientific publication as your own work.

- Do not scan, copy or paste software or laboratory printouts as that would not be accepted by an editor of a scientific publication as your own work. You must reproduce the essential data in your own format, omitting the unnecessary information.

Case follow-up:

11. A case report based on **teleconsulting is dependent on another's nutritional assessment and therefore careful consideration should be taken to ensure all the essential information is accurate and consistent throughout the case management** before writing as an ACVN Report.
 - A report lacking an initial muscle condition score in a dog with protein losing enteropathy because it was not assessed by the rDVM will hinder nutritional planning, management and subsequent follow-up assessments of the feeding plan.
12. If you don't have adequate follow-up to demonstrate the outcome of your nutritional recommendations for whatever reason, e.g., lost contact with owner, the case was received shortly before case report deadline, etc., the case is not suitable for a report. You have no case to report without at least two re-assessments with substantive data on the parameters you chose to monitor; two or more follow-up time points with full re-assessments strengthens the report and allows full fruition of your nutritional plan to become evident. Follow-ups should be proactive (as opposed to passive) on your part. The reason for a re-assessment should not be the result of the owner or clinician contacting you only when there is a problem. Include BW, BCS and MCS (if applicable), laboratory and diagnostic follow-up and all pertinent physical examination findings at each time point to demonstrate the effectiveness of your nutritional plan. **It is essential to demonstrate that your nutritional plan had a positive impact on the patient.**
 - A cat with inflammatory bowel disease that was started on steroids and had a diet change around the same time is not a good case to select because one cannot differentiate the lack of clinical signs due to diet from the effect of steroids.
 - Similarly, for a dog with urolithiasis that was managed with diet, there would need to be clear documentation in the report of no urolith recrudescence, e.g., ultrasound ~1 year later to demonstrate that the diet reduced the incidence of stone formation that historically had reoccurred every 3 months.