

POULTRY SCIENCE ASSOCIATION



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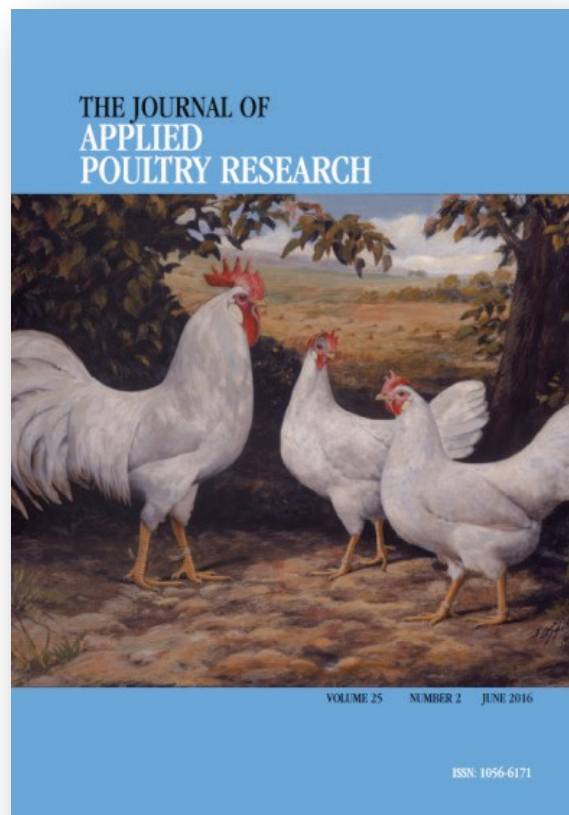


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I. Scope and general information

A. Scope

The mission of *The Journal of Applied Poultry Research (JAPR)* is to provide practical, reliable, and timely information to those whose livelihoods are derived from the commercial production of poultry and those whose research benefits this sector; address topics of near-term application based on appropriately designed studies and critical observations; encourage scientific approaches to practical problem solving; and present information comprehensible to a broad readership. Opinions or views expressed in papers published by *JAPR* are those of the authors and do not necessarily represent the opinion of the Poultry Science Association or the editor-in-chief.

B. Submission

All manuscripts are submitted and reviewed via the journal's [Scholar One Manuscripts submission site](http://mc.manuscriptcentral.com/japr) at <http://mc.manuscriptcentral.com/japr>. New authors should create an account prior to submitting a manuscript for consideration.

C. Contact information for journal staff

For information on the scientific content of the journal, contact the editor-in-chief, Dr. John Carey, Texas A&M University
Department of Poultry Science, 101 Kleberg Center, 2472 TAMU, College Station, TX 77843-2472; e-mail: jcarey@poultry.tamu.edu

For assistance with ScholarOne Manuscripts and manuscript submission, contact David Busboom at david.busboom@poultryscience.org.

For assistance with article proofs, copyright forms, published manuscripts, contact Matthew Marusak at poultry.science@oup.com.

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D. Types of articles

i.) Research reports

Most papers published in *JAPR* are research reports. The journal emphasizes the importance of good scientific writing and clarity in presentation of the concepts, apparatus, and sufficient background information that would be required for thorough understanding by scientists in other disciplines. The results of experiments published in *JAPR* must be replicated, either by replicating treatments within experiments or by repeating experiments.

ii.) Field reports

Field reports will be published when adequate background is available and conclusions can be supported by quantifiable laboratory or diagnostic results.

The manuscript should follow the format outlined in the Style and Form section of this document. It should include a section titled Field Report in which the observations are explained and discussed under subheadings of Materials and Methods and Results and Discussion. Authors are encouraged to include subheadings for all major areas in this section.

iii.) Review articles

Articles submitted to this section may cover new developments in a field, describe the evolution of a currently accepted management practice, propose changes in management based on current research, or describe procedures. Clear distinctions should be made between firmly established practices and unresolved questions. Articles should begin with a concise description of the topic, followed by a critical evaluation of the important references. Review articles, whether solicited or unsolicited, will be subject to a stringent review process.

Review articles should follow the general format outlined in the Style and Form, when appropriate, and include brief subheadings to separate main ideas. A Conclusions and Applications section should be included in most cases.

iv.) Symposium and workshop articles

Manuscripts presented at the annual meeting as part of a symposium or workshop may be submitted with prior agreement by the editor-in-chief. These submissions will be subject to peer review and may be accepted or rejected in the same manner as other submissions. The format may be similar to reviews, research reports, or field reports, as outlined in the Style and Form.

v.) Letters and commentaries

The journal accepts letters, book reviews, and other free-form communications (used to correct errors, provide clarification, or offer other points of view on pertinent issues). Submissions may be edited in consultation with the author.

II. Journal Policies

A. Peer review process

The journal uses a two-stage review process. All manuscripts will first receive a preliminary review to ensure appropriateness for the journal. The second review will be a more detailed scrutiny by individuals knowledgeable in the specific subject area of the paper. Additional examination of the manuscript will be made by the editors.

The review process will be stringent. Names of authors will be made known to reviewers; reviewers may contact the authors directly with questions, suggestions, and comments if such contact will improve the paper or streamline the review process. The subject editors will handle all initial correspondence with authors during the review process; the editor-in-chief will notify the author of the final decision to accept or reject.

B. Pre-review language editing

If your first language is not English, to ensure that the academic content of your paper is fully understood by journal editors and reviewers, we recommend using an external language editing service. Language editing is optional and does not guarantee that your manuscript will be accepted for publication. For further information on this service, please click [here](#). Several specialist language editing companies offer similar services and you can also use any of these. Authors are liable for all costs associated with such services.

C. Post-production corrections

No correction to a paper already published will be carried out without an erratum or corrigendum (as applicable), this applies to papers on Advance Access and published within an issue. This means that any change carried out to a paper already published online will have a corresponding erratum or corrigendum published with its own separate DOI. Whether on Advance Access or in an issue, if an erratum or corrigendum is published, the online version of the original paper will also be corrected online and the correction notice will mention this. Corrections will only be made if the publication record is seriously affected by the academic accuracy of published information.

Authors' corrections to Supplementary Data are made only in exceptional circumstances (for example major errors that compromise the conclusion of the study). Because the Supplementary Data is part of the original paper and hence the published record, the information cannot be updated if new data have become available or interpretations have changed.

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i.) General

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ii.) Preparing the manuscript file

Manuscripts should be typed double-spaced, with lines and pages numbered consecutively, using Times New Roman font at 12 points. All special characters (e.g., Greek, math, symbols) should be inserted using the symbols palette available in this font. Complex math should be entered using MathType from Design Science (www.dessci.com). Tables and figures should be placed in separate sections at the end of the manuscript (not placed within the text).

Metric or English units (or both) are acceptable. Authors should use units appropriate for the intended audience. Energy content of feeds will be expressed as calories.

iii.) Headings

1. Major headings

Major headings are centered, boldface, in all capital letters, and consist of SUMMARY, DESCRIPTION OF PROBLEM, MATERIALS AND METHODS, RESULTS AND DISCUSSION, CONCLUSIONS AND APPLICATIONS, and REFERENCES AND NOTES.

Major headings in review articles, field reports, and symposium articles may vary from those listed here, but should include SUMMARY, CONCLUSIONS AND APPLICATIONS, and REFERENCES AND NOTES.

2. First subheadings

First subheadings are boldface and italic, on a separate line beginning at the left margin, and have the first letter of each important word capitalized. Text that follows a first subheading should be in a new paragraph.

3. Second subheadings

Second subheadings begin the first line of a paragraph. They are indented, boldface, italic, and followed by a period. The first letter

of each important word is capitalized. The text follows immediately after the final period of the subheading.

iv.) Title page

The title should be indicative of the content. It should capture the interest of all who might benefit from information in the manuscript. However, the length of the title should be kept to a minimum. The running title should be 30 characters or less, including spaces.

Address and affiliation of authors (listed by first name or initials, middle initial, and last name) should be included. Indicate to whom correspondence should be directed by means of a footnote, with the notation

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List 3 to 8 key words or phrases to identify the most important subjects covered by the paper.

Statement of primary audience. To determine appropriateness for the journal and to assist in selecting reviewers, the author should indicate clearly what sector(s) within the poultry community (e.g., flock supervisors, nutritionists, quality assurance personnel, researchers, plant managers, veterinarians) could benefit most from the content of this article.

v.) Summary

The Summary (maximum of 250 words) is not an abstract. It is intended to give readers with diverse backgrounds a general appreciation of the manuscript contents. It should be written so that even those not directly interested in the topic will enjoy reading at least this section to keep abreast of areas other than their own. This section should not include details of materials and methods or a detailed review of the results. Keep the summary free-flowing, giving the reader a general, not specific, idea of what the study revealed. Do not include reference citations in the summary.

vi.) Description of problem

This section will acquaint the reader with the problem, citing field experiences where appropriate. Readability is of utmost importance. Detailed literature reviews may not be appropriate for this section. A more extensive citation of references should be included in the Results and Discussion or References and Notes section. This section should end with a statement of the objective(s) of the study.

vii.) Materials and methods

All sources of products, equipment, and chemicals used in the experiments must be specified parenthetically at first mention in text, tables, and figures [i.e., (model 123, ABC Corp., Provo, UT)]. Model and catalog numbers should be included. Information shall include the full corporate name (including division, branch, or other subordinate part of the corporation, if applicable), city, and state (country if outside the United States), or Web address. Street addresses need not be given unless the reader would not be able to determine the full

address for mailing purposes easily by consulting standard references.

viii.) Results and discussion

This section begins with observed results and their interpretation. Descriptive subheadings may precede all major paragraphs and changes in subject emphasis. This section should discuss specifically how findings address the problem described in the Description of Problem section and how they are related to published works.

Statements regarding statistically significant differences between treatments in results should be included in the text, tables, and figures. Statements regarding differences should be avoided unless they are supported by statistical analyses and meet the stated level of probability (e.g., $P < 0.05$).

ix.) Conclusion and applications

Conclusions and recommendations of the author(s) should be listed numerically. Each statement should be clear, concise, and without discussion. Authors are encouraged to summarize their significant findings, to identify further research needs, and to describe the constraints, economics, and other factors associated with using the results in scientific or commercial applications. Do not include references in this section.

x.) References and notes (with Acknowledgements)

Citations in Text: In the body of the manuscript, refer to authors as follows: Smith and Jones (1992) or Smith and Jones (1990, 1992). If the sentence structure requires that the authors' names be included in parentheses, the proper format is (Smith and Jones, 1982; Jones, 1988a,b; Jones et al., 1993). Where there are more than two authors of one article, the first author's name is followed by the abbreviation et al. More than one article listed in the same sentence of text must be in chronological order first, and alphabetical order for two publications in the same year. Work that has not been accepted for publication shall be listed in the text as: "J. E. Jones (institution, city, and state, personal communication)." The author's own unpublished work should be listed in the text as "(J. Smith, unpublished data)." Personal communications and unpublished data must not be included in the References section.

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names must appear in the Reference section. Journals shall be abbreviated according to the conventional ISO abbreviations given in journals database of the National Library of Medicine. One-word titles must be spelled out. Inclusive page numbers must be provided.

xi.) Sample references

1. Journal Article

Dansky, L. M., and F. W. Hill. 1952. Application of the chromic oxide indicator method to balance studies with growing chicks. *J. Nutr.* 47:449–459.

Snow, J. L., M. W. Douglas, and C. M. Parsons. 2003. Phytase

effects on amino acid digestibility in molted laying hens. *Poult. Sci.* 82:474–477.

Witter, R. L., and I. M. Gimeno. 2006. Susceptibility of adult chickens, with and without prior vaccination, to challenge with Marek's disease virus. *Avian Dis.* 50:354–365. doi:10.1637/7498-010306R.1

2. Monograph

NRC. 1994. *Nutrient Requirements of Poultry*. 9th rev. ed. Natl. Acad. Press, Washington, DC.

3. Dissertation

Heskett, E. A. 2003. Efficacy of a recombinant herpes virus of turkeys vector vaccine, expressing genes to Newcastle disease virus and Marek's disease virus, in chickens and turkeys against exotic Newcastle disease virus challenge. PhD Diss. Univ. Florida, Gainesville.

4. Trade Publication

Wilgus, H. S. 1973. Temperature-programmed feeding schedules and other means of conserving protein in market turkey production. *Feedstuffs* 45(27):27–31.

5. Book or Chapter in Book

AOAC International. 2007. *Official Methods of Analysis of AOAC International*. 18th ed. Rev. 2. AOAC Int., Gaithersburg, MD.

Whittow, G. C. 1976. Regulation of body temperature. Pages 146–173 in *Avian Physiology*. P. Sturkie, ed. Springer-Verlag, New York, NY.

6. Proceedings

Hruby, M., J. C. Remus, and E. E. M. Pierson. 2004. Nutritional strategies to meet the challenge of feeding poultry without antibiotic growth promotants. Pages 3–5 in *Proc. 2nd Mid-Atlantic Nutr. Conf.*, Timonium, MD. Univ. Maryland, College Park.

7. Federal Register

USDA, Animal and Plant Health Inspection Service. 2004. Blood and tissue collections at slaughtering and rendering establishments, final rule. 9CFR part 71. *Fed. Regist.* 69:10137–10151.

8. Proprietary Product

Avizyme TX, Finnfeed International, Marlborough, Wiltshire, UK.

Thymol, 99% purity, Acros Organics, Geel, Belgium.

9. Statistical Software

SAS User's Guide. 2001. Version 8 ed. SAS Inst. Inc., Cary, NC.

10. US Patent

El Halawani, M. E., and I. Rosenboim. 2004. Method to enhance reproductive performance in poultry. Univ. Minnesota, assignee. US Pat. No. 6,766,767.

11. Website

Dyro, F. M. 2005. Arsenic. WebMD. Accessed Feb. 2006. <http://www.emedicine.com/neuro/topic20.htm>.

12. Acknowledgments

The advice and technical assistance of Thomas Jones (affiliation, location) are acknowledged.

B. Tables

Number tables consecutively according to the citation in the text. Tables must be created using the Microsoft Word table feature and inserted in the manuscript after the references section. Each table must be placed on a separate page and must have a clear descriptive heading so that the meaning of the data will be understandable without reference to the text. Indicate footnotes to tables with numbers, beginning with 1.

Statistical notation should be made with lowercase and uppercase superscript letters or with asterisks, as appropriate. Statistical notation should place the superscript "a" on the largest mean. Probability values may be indicated as follows: * $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.001$, and + $P \leq 0.10$. Consult a recent issue of the journal for examples of tables.

C. Miscellaneous usage notes

i.) Abbreviations

The following abbreviations may be used without definition in *JAPR*. Plurals do not require "s." Chemical symbols and 3-letter abbreviations for amino acids do not need definition. Other abbreviations should be defined at first use in the summary and the main text, as well as in each table or figure in which they appear. Author-defined abbreviations are boldface at first use in the main text. Abbreviations should not be used in the manuscript title, running title, or to begin a paragraph or sentence. They can be used in section headings if previously defined. This list appears inside the back cover of each issue of the journal.

The following abbreviations may be used without definition in *JAPR*:

ADF acid detergent fiber

ADFI average daily feed intake

ADG average daily gain

AME apparent metabolizable energy

AMEn nitrogen-corrected apparent metabolizable energy

ANOVA analysis of variance

AOAC Association of Official Analytical Chemists

BSA bovine serum albumin

BW body weight

°C Celsius

cDNA complementary DNA

CF crude fiber

cfu colony-forming units (following a numeral)

CI confidence interval

CP crude protein

cpm counts per minute

CV coefficient of variation

d day

df degrees of freedom

DM dry matter

DNA deoxyribonucleic acid

EDTA ethylenediaminetetraacetate

EE ether extract

ELISA enzyme-linked immunosorbent assay

°F Fahrenheit

FCR feed conversion ratio

FE feed efficiency

ft foot

g gram

gal gallon

G:F gain-to-feed ratio

GLM general linear model
h hour
HEPES N-(2-hydroxyethyl)piperazine-N'-2-ethanesulfonic acid
HPLC high-performance (high-pressure) liquid chromatography
ICU international chick units
Ig immunoglobulin
IL interleukin
i.m. intramuscular
in. inch
i.p. intraperitoneal
IU international units
i.v. intravenous
kcal kilocalorie
L liter (also capitalized with any combination, e.g., mL)
lb pound
L:D hours of light:hours of darkness in a photoperiod
LSD least significant difference
m meter
 μ micro
M molar
ME metabolizable energy
MEn nitrogen-corrected metabolizable energy
MHC major histocompatibility complex
mRNA messenger ribonucleic acid
min minute
mo month
MS mean squares
n number of observations
NADH reduced form of NAD
NDF neutral detergent fiber
NRC National Research Council
NS not significant
PBS phosphate-buffered saline
PCR polymerase chain reaction
ppm parts per million
r correlation coefficient
r² coefficient of determination, simple
R² coefficient of determination, multiple
RH relative humidity
RIA radioimmunoassay
RNA ribonucleic acid
rpm revolutions per minute
s second
SAS Statistical Analysis System

s.c. subcutaneous
SD standard deviation
SE standard error
SEM standard error of the mean
SNP single nucleotide polymorphism
SRBC sheep red blood cells
TBA thiobarbituric acid
T cell thymic-derived cell
TME true metabolizable energy
TMEn nitrogen-corrected true metabolizable energy
TSAA total sulfur amino acids
USDA United States Department of Agriculture
UV ultraviolet
vol/vol volume to volume
vs. versus
wt/vol weight to volume
wt/wt weight to weight
wk week
yr year

ii.) SNP Nomenclature

The increasing number of SNP association studies and the improvements in chicken genome annotation require a standardized SNP nomenclature for unequivocal and correct SNP identification. Additionally, information regarding the SNP investigated should be easily accessible in a publicly available database. Therefore, all relevant SNP included in a study should be listed with their unique RefSNP (rs) or submitted SNP (ss) number (if rs number is not yet available) as indicated in the public domain NCBI dbSNP database (<http://www.ncbi.nlm.nih.gov/snp>). If the SNP investigated do not yet have an entry in the NCBI dbSNP database, the authors of the manuscript are responsible for submitting all the required information to NCBI (see <http://www.ncbi.nlm.nih.gov/projects/SNP/>) for depositing the SNP into this database and obtaining a unique ss number for the SNP. In the text of the manuscript, use of the rs/ss number of the SNP or an alternative standardized nomenclature is recommended.

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ii.) Requirements

Submission of figures in an electronic format will help us to ensure that your work is produced to the highest possible standard. This page contains information on how best to prepare your artwork for electronic submission. Most figure file formats are acceptable, although TIFF is preferable. TIFFs (Tagged Image File Format) are used for bitmap, greyscale, and colour images. To save files in TIFF format, go to the 'Save As' or 'Export' commands under 'File'.

Before submitting artwork, please make sure that your image(s) fulfil the following criteria

iii.) Formats

A number of different file formats are acceptable, including:

1. Tagged Image File Format (.tif)* (please check settings when exporting to Tiff from the original application).
2. Encapsulated PostScript (.eps)*
3. Rich Text Format (.rtf)
4. (Editable) Microsoft Word (.doc/.docx) (image files embedded into Word are often not good quality).
5. (Editable) Microsoft PowerPoint (.ppt/.pptx) (image files embedded into PowerPoint are often not good quality).
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7. editable Portable Document Format (PDF)
8. Postscript (.ps)
9. Photoshop (.psd)
10. Adobe Illustrator (.ai)
11. Graphics Interchange Format (.gif)
12. Portable Network Graphics (.png)

*preferred file format. Note that .jpg is not a file format listed as files produced as JPGs condense every time they are opened (and thus lose quality).

iv.) A note about resolution and quality: PPI vs. DPI

1. The quality of an image is not dependent upon DPI. Typically when an image is of low quality (even though the resolution is within standards), the image contains pixelated text. This means that the figure should be redrawn using a standard font and that care should be taken to ensure the font is embedded.
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Avoid the use of gray or color in bar graphs. Instead, please use solid black, solid white, and patterned (e.g., horizontally or diagonally striped) bars.

2. Line art

Line art is best reproduced when it is submitted as crisp black-and-white images and contains no unnecessary gray shading.

3. Patterns

If your image requires the use of many lines (as line graphs often do), please choose patterns that are easily distinguished from each other. Patterns with similar characteristics are hard to differentiate after reduction.

For additional useful information on preparing your figures for publication, go to <http://art.cadmus.com/da/index.jsp>.

4. Equations and tables

All equations to be formatted using MathType only; image versions should be avoided.

All tables to be in editable format in either Word or Excel; image and pdf versions should be avoided.

vi.) Requirements

Follow these rules for figures:

1. Number them consecutively following the sequence in which they are mentioned in the text.
2. Include scale bars where appropriate. These should not be placed in the legend.
3. Size figures for publication:

Design	Page size	Page size in inches	No of columns	Required figure processing width	
				Single column (mm/in.)	Double column (mm/in.)
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Medium format	246 x 189 mm	9.68 X 7.44 in.	Double	80 mm/3.15 in.	160 mm/6.30 in.
Small format	234 x 156 mm	9.21 X 6.14 in.	Single	130 mm/5.12 in.	

4. Figures must:

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- Have all data included within the illustration area.
- Avoid placing labels over a shaded area of the image.

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