



## *Manuscript Checklist*

Revised December 2019

The following checklist and template are designed for authors to compose the manuscript to conform to the Meat and Muscle Biology (*MMB*) policies and style. Authors should consult the latest version of the *MMB* Policies, Style Guide, and Instructions for Authors in preparing the manuscript (<http://www.meatscience.org/publications-resources/mmb/mmb-instructions-to-authors>). Manuscripts should be submitted to the MMB Image Iowa State University Digital Press website at <https://www.iastatedigitalpress.com/mmb/>.

### **Title Page**

- Running head limited to 45 characters, no abbreviations
- Listing of all authors' full names and affiliations in correct order
- Corresponding author name and email address on title page

### **Abstract**

- Maximum of 300 words, abbreviations defined at first use
- Evidence of statistical analysis of data, *e.g.*  $P=0.012$ .
- 1 or 2 sentences of the important findings or conclusions at end of abstract
- Key words (6 or less) after the abstract

### **Text sections**

- Centering, boldface, capitalized main headings
- Secondary head flush left, boldface, italic, title case
- Abbreviations defined at first use except for weights and measurements in SI format
- Manufacturer/supplier name and location for all chemicals and uncommon equipment and instruments
- Citations in text are in chronological order; if 2 or more publications in the same year, then alphabetical order; format of Smith and Jones (2008), (Smith and Jones, 2008), (Smith et al., 2008)
- Commas for numbers greater than 1,000, zeroes before decimal point for numbers less than 1
- Equations are part of sentences, with all equation terms defined

### **Literature Cited**

- Author(s). Year. Title. Source vol.:inclusive pages
- Citations in alphabetical order by author last name
- Appropriate journal title abbreviations
- Only citations used in text appear in this section

### **Tables and Figures**

- Should be self-contained and self-explanatory, with explanations for all abbreviations
- Concise figure captions and table titles
- Tables and figures numbers chronologically in order of appearance in text

### **Copyrights**

- Check *MMB* Policies, Style Guide, and Instructions for Authors for appropriate procedures and forms

# *Meat and Muscle Biology Manuscript Template*

The running head (that will be at the top of each page) is limited to 45 keystrokes

**Title of paper (12-15 words or less), capitalize only the first word and any proper nouns<sup>1</sup>**

**Abner B. Smith<sup>2</sup>, Clyde D. Jones<sup>3</sup>, Ezra F. Johnson<sup>3,\*</sup> and Research Consortium<sup>4</sup>**

<sup>2</sup>Author research affiliation or institution, city, state, country (if outside of the United States), postal code.

<sup>3</sup>Research affiliations of authors different than the first or other authors given as research affiliation or institution, city, state, country (if outside of the United States), postal code.

<sup>4</sup>Give website (<http://...>) where the names and affiliations of scientists working with a Research Consortium (or other collaborative affiliation) are listed

**ABSTRACT:** It is a brief summary of the reason or objective of the research, experimental units or samples, descriptive results, and a conclusion. The abstract should be less than 300 words, preferably less than 250 words for abstracting services. Abbreviations must be defined in the abstract and also defined when they are first used in the manuscript and in each table and each figure.

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<sup>1</sup> Acknowledgements are a footnote to the title and may include those for funding source, journal or experiment station approval number, or similar short statements. Other acknowledgements of disclosure of potential or actual conflicts of interest about the research, sponsorships, donations, personal thanks should be in the Acknowledgements section before the Literature Cited section.

\*Corresponding author email should be denoted by the \* and given here.

20 **Key words:** Give up to 6 key words or phrases that include the animal species, variables, and  
21 primary factors measured.

## 22 **INTRODUCTION**

23 Authors should consult with the *Meat and Muscle Biology* (MMB) Style Guide on the American  
24 Meat Science Association website (<http://meatscience.org/publications-resources/mmb>). All  
25 manuscripts must be in English and submitted in a file format that can be edited, preferably in  
26 Microsoft Word. The introduction should be as brief as possible while giving an introduction and  
27 justification for the research, clear hypotheses that were tested, and the objective(s) of the  
28 research. The extensive discussion of literature pertaining to the research should be in the  
29 Discussion (or Results and Discussion section, if combined). References in the text should be in  
30 the format of Smith and Jones (2008), (Smith and Jones, 2008; Jones, 2010), Smith et al. (2008),  
31 (Smith et al., 2008; Jones et al., 2010; Adams et al., 2015). References with the same authors and  
32 the same year should be differentiated as (Smith and Jones, 2008a,b) in the text and in the  
33 Literature Cited.

## 34 **MATERIALS AND METHODS**

35 The materials and methods section is required. Statements of institutional animal care and use  
36 committee approval or institutional review board approvals for human subject use should be  
37 given first in this section. These statements of affiliation or institution review and approval of the  
38 research should conform with accepted standards. The materials and method section must  
39 contain a clear description of the conduct or protocol for the experiment, including the  
40 experimental conditions, experimental design, and the method and statistical model by which the  
41 data was statistically analyzed.

42 For sensory studies, information on study parameters including source of samples, storage,  
43 preparation methods, temperature parameters, serving size, number of samples per session,  
44 number of sessions per day, time between samples, number of replications, duplication, palette  
45 cleansers, serving order design, use of carriers and other key information on the sensory test  
46 should be provided in the methods. For descriptive studies using trained panels, the number of  
47 panelists, the type and length of training, definition of scales and attributes, and how the panel  
48 was monitored and validated must be given. For consumer studies, the number of consumers,  
49 basic demographic information, recruitment/selection pool and criteria are required. Information  
50 from AMSA Research Guidelines for Cookery, Sensory Evaluation, and Instrumental  
51 Tenderness Measurements of Meat ([http://meatscience.org/publications-resources/printed-  
52 publications/sensory-and-tenderness-evaluation-guidelines](http://meatscience.org/publications-resources/printed-<br/>52 publications/sensory-and-tenderness-evaluation-guidelines)) should be used and cited.  
53 For color measurements, the AMSA Meat Color Measurement Guidelines  
54 ([http://meatscience.org/publications-resources/printed-publications/amsa-meat-color-  
55 measurement-guidelines](http://meatscience.org/publications-resources/printed-publications/amsa-meat-color-<br/>55 measurement-guidelines)) should be consulted and cited.

### 56 ***Subheading***

57 Subheading titles should be in bold and italicized lettering, if used, but are not required. The  
58 information under each subheading contains specific information about an aspect of the  
59 manuscript and may be in the materials and methods, results, discussion (or results and  
60 discussion section, if combined).

## 61 **RESULTS**

62 Present results in tables or figures whenever possible. The text in the results section should  
63 explain where the results are in the manuscript and generally describe the results obtained, but  
64 not repeat the numbers or data given in the tables or figures. The text should provide an

65 indication of the variation associated with the results, preferably as the significance level or *P*  
66 value. It is desirable to give the actual significance level ( $P=0.013$ ) rather than  $P<0.05$  or  $P<0.01$ .

## 67 **DISCUSSION**

68 The discussion is the interpretation of the results from a scientific perspective. The  
69 biological, physiological, and/or chemical processes to explain the results should be given clearly  
70 and concisely. The discussion should include pertinent findings from previous scientific or  
71 pertinent literature (see Introduction Section above for examples of citing references in the text  
72 to give appropriate attribution to the source of the information) and integrate these sufficiently in  
73 the discussion of the results to allow the reader to make independent interpretations and  
74 evaluations of the meaning of the research. Conclusions about the interpretation of the research  
75 and its use can be in this section or a separate section.

76 Some authors prefer, and some research is best presented, by combining the results and  
77 discussion into a single results and discussion section.

## 78 **CONCLUSIONS**

79 The concluding statements on the meaning and use of the research can be in a separate section or  
80 included in the discussion section.

## 81 **ACKNOWLEDGEMENTS**

82 This section is for disclosure of potential or actual conflicts of interest about the research, grant  
83 details, sponsorships, donations, and personal thanks.

## 84 **LITERATURE CITED**

85 All references cited in the text of the manuscript should be listed. All citations must have been  
86 published or have been accepted for publication (with a doi number) to be included in this  
87 section. Unpublished data or personal communications are not allowed in this section without

88 specific explanations of why the information is not available from a published, preferably peer  
89 reviewed, source. Each citation must follow the format for its specific type (refereed journal  
90 article, book, book chapter, bulletin, website) according to the *MMB* Style Guide. Citations  
91 should be given in alphabetical order by last name of first author. Multiple citations having the  
92 same first author are listed in alphabetical order of the last name of the first author, last name of  
93 the second author, last name of the third author and so forth. Two or more publications by the  
94 same author or the same set of authors in the same year would be distinguished by adding  
95 lowercase letters after the year, i.e. 2010a, 2010b.

96 Adams, J.J. 2015. Title. Journal title vol:pages.

97 Brown, L .D. 2001. Title. Journal title vol:pages.

98 Brown, L. D. and G. C. Smith. 2014. Title. Journal title vol:pages.

99 Brown, L. D., G. C. Smith, and J. D. Tatum. 2005. Title. Journal title vol:pages.

100 Brown, L. D., G. C. Smith, and J. D. Tatum. 2007a. Title. Journal title vol:pages.

101 Brown, L. D., G. C. Smith, and J. D. Tatum. 2007b. Title. Journal title vol:pages.

102 Brown, L. D., G. C. Smith, J. D. Tatum, K. J. Jones, and A. Q. Brown. 2001. Title.

103 Journal title vol:pages.

104 Brown, L. D., G. C. Smith, E. C. Vandegraft, and J. D. Tatum. 2015. Title. Journal title

105 vol:pages.

106 Brown, L. D. and J. H. Ziegler. 1994a. Title. Journal title vol:pages.

107 Brown, L. D. and J. H. Ziegler. 1994b. Title. Journal title vol:pages.

108 Carter, H.D., Q.S. Jones, and L.D. Brown. 1987. Title. Journal title vol:pages.

109 McLin, A.J., H.D. Carter, and L.D. Brown. 1986a. Title. Journal title vol:pages.

110 McLin, A.J., H.D. Carter, and L.D. Brown. 1986b. Title. Journal title vol:pages.

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## **Tables and Figures**

Tables and figures are at the end of a manuscript and must give independent information to be understood without the reader needing to read text in the manuscript. The captions for figures are given in a list, followed by the tables in chronological order, and the figures themselves last. Figures should be twice the size that will be in the typeset article, usually at least half a page in the manuscript. Abbreviations must be defined in each table and figure. It is acceptable to explain the abbreviation meaning in a footnote to the table. The listing of proprietary products in a table or figure must give the manufacturer name and location. All tables and figures must show the measure of variation and evidence of statistical analysis of the data.

Tables must be created using the table feature in MS Word. Tables shown as image files or in formats that cannot be edited will result in rejection of the manuscript.

Do not use image files or non-editable formats for tables.

Figures should also give independent information and have a caption and appropriate legends. Each figure should be on a separate page with identification of the figure number and the legend for the figure. Because *MMB* is an online journal, figures should be submitted in the format and with sufficient resolution in which they can be best interpreted, and in color if that enhances the depiction of the information. Figures should be twice the size that it is anticipated that they will appear in the typeset publication. Photographs are discouraged unless absolutely the only means to show, explain, or describe a concept or apparatus.