

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

INSTRUCTIONS TO METHOD AUTHORS

FORMATTING OMA METHOD MANUSCRIPTS FOR PUBLICATION IN THE JOURNAL OF AOAC INTERNATIONAL

**Journal of AOAC INTERNATIONAL (JAOAC) Method Manuscript Template – Test
Method Matrix(es) Extension**

Required Manuscript Sections

Method Title

Author Listing and Information

Abstract

Introduction

Multi-Laboratory Study Results

Method Document

Results and Discussion (or you may separate these)

Conclusion

Acknowledgments

Conflict of Interest Statement

Funding Disclosure (if applicable)

Supplemental Information (if applicable)

References

Figure Captions

Tables And Figures

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

Method Title

- **Method Name** - to include identifiers for relevant matrixes and analytes. Official Methods of Analysis (OMA) reference number is included.
- Example:

Validation of the Test Method/Modification for Detection/Determination/Enumeration of Analyte in Matrix(es): First/Final Action 20xx.xx

Author Listing and Information

- **Names** – Include First name, middle initial, last name
- **Affiliation** – Provide list organizational affiliate for each co-author
- **Example** –
- **Corresponding author’s e-mail**
- **ORCID Numbers**
 - o All authors are required to submit their ORCID number please list the author name and their number here. Visit www.orcid.org to register for an ORCID number.

Abstract

The Abstract must be no more than 300 words in length, contain a brief description of the method, matrixes¹ tested and brief summary of results.

Note: The term “matrixes” is used in JAOAC publications, instead of matrices.

Abstracts should be organized by background, objective, methods, results, conclusions, highlights with section titles included in bold as shown below:

Background:

Objective:

Methods:

Results:

Conclusions:

Highlights:

Abstract Format

- No indentation for the abstract only.
- Do not cite tables, figures, or references in the Abstract.
- Spell out or define terms and follow each with an abbreviation/acronym in parentheses *if*

1

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

the term is used more than once in the Abstract. Do not include the abbreviation/acronym if the term is not used more than once.

- Do not include any information that is not part of the study reported (e.g., future plans or suggestions).
- Acronyms/abbreviations, definitions, names of bacteria, etc., must be identified/spelled out in the body of the paper (even though they were written out or defined in the Abstract.)
- If referring to an AOAC method number in the text (or reference list), the number should be bolded, e.g.: AOAC Method **2015.01**.

Introduction

The Introduction should supply sufficient background to enable the reader to attain the proper understanding and perspective for the study. Cited references should be listed in sequential numerical order with the reference number indicated in the text with number placed in parentheses (not superscript).

The Introduction should provide the hypothesis that was addressed or the rationale for the present study. If the manuscript describes a new method, indicate why it is preferable to existing methods.

Note: Tables and Figures: Tables and Figures included in the manuscript that are not part of the Method document itself should be numbered consecutively using the following format: Table 1, Table 2, Figure 1, Figure 2, etc.

Note: Units of Measure: Use the International System of Units (S.I. Units) for reporting measurement results. The Journal prefers the use of the front solidus (/) when expressing units of measure rather than negative index format. For example, use $\mu\text{g}/\text{kg}$ not $\mu\text{g kg}^{-1}$.

Note: Abbreviations, Acronyms, and Initialization: Define non-standard abbreviations (or acronyms, initializations) at first use in parentheses. Care should be taken to limit the use of non-standard abbreviations to improve manuscript readability. Appropriate abbreviations should replace complicated chemical or biological names, but not be used when the reader would substitute the abbreviation for the actual word while reading. Ensure consistency of abbreviations throughout the article. Do not italicize common Latin expressions such as et al., in vitro, via, etc.

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

A list of standard acronyms and initialization can be found at:

<http://www.eoma.aoac.org/web%20definition%20of%20terms%20and%20explanatory%20notes.pdf>.

Single Laboratory Validation and/or Multi-laboratory (Reproducibility) Study

Subheadings should be written in italic font and may include, but are not limited to, the following:

Study Design

Sample Handling

Test Portion Distribution

Preparation of Test Portions

Test Portion Analysis

Statistical Analysis

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

Method Document

[start of method document]

AOAC Official Method 20xx.xx (AOAC will fill this in later)

Title of Method

Instrumentation/Technology

First/Final Action 20xx (year approved)

[Applicable to....] Specify utility and limitations on scope of method and other pertinent information

Caution: Statement specifies precautions and possible hazards in carrying out the method, including safety information on applicable equipment, techniques and practices along with safe handling of chemicals, acids, alkalies, microorganisms, and solvents.

Methods are divided into several descriptive sections, including specifications for necessary laboratory apparatus and reagent preparations.

A. Principle (Major headings should be labeled with a capital letter A., B., etc.)

B. Chemicals and Reagents [This section should include the name of the reagent/chemical, description, manufacturer (city, state, and country) and Model number if available. You may use the registered mark on the first citing after that the copyeditors will delete the registration mark.]

Example:

(a) PCR reagent strips.—Two pouches with 12 strips of 8 tubes (2 x 96 tubes) (Manufacturer, city, state, country).

(b) GENE-UP *Listeria spp. 2 (LIS 2)*.—bioMe´rieux, Inc., (Hazelton, MO, USA) Ref 423106 (192 tests) – Store kit at 2–25°C.

Note: Second-level lists are labeled with a bold letter inside parenthesis. You may have a 3rd level if needed. They should be set as follows:

(1)

(2)

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

(3)

C. Apparatus

This section should include the name of the apparatus, description, manufacturer (city, state, and country) and Model number if available.

Note: You may use the registered mark on the first citing after that the copyeditors will delete the registration mark.

Example:

(a) *Ultra-HPLC (UHPLC) system.*—Nexera (Shimadzu, Kyoto, Japan) or equivalent LC system consisting of a dual pump system, a sample injector unit, a degasser unit, and a column oven.

C. General Instructions or General Preparation

D. Sample Preparation

E. Determination

F. System Suitability

G. Calculations

Note: Table and Figure numbering: Tables and Figures that appear within the method text should be numbered using the format as follows: 2022.xx^A, 2022.xx^B, including data supporting the reproducibility of the method (First Action for microbiology, Final Action for chemistry)

[end of method document]

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

Results and Discussion (or you may separate these)

Results

Level 2 headings should be italic. Examples include:

Calibration Study, Validation Study, Method Developer Studies etc.

Discussion

Conclusion

Acknowledgments

Conflict of Interest

If a conflict of interest does not exist for any of the authors, please include the statement: ‘All authors declare no conflict of interest.’ If any author has a conflict of interest, please state the details of the conflict for each author.

Funding (Statement of funding for project, if applicable)

Supplemental Information (if applicable)

Must be uploaded as a separate document clearly labeled.

Supplemental information is available on the *J. AOAC Int.* website.

References

List references numerically in References section in exact arrangement, punctuation, capitalization, use of ampersand, etc.

Examples:

Journal Article

1. Tuzimski, T., Pieniążek, D., Buszewicz, G., & Teresiński, G. (2019) *J. AOAC Int.* **102**, 23–32. doi: 10.5740/jaoacint.18-0297

Book Chapter

1. Min, D.B., & Ellefson, W.C. (2010) in *Food Analysis*, 4th Ed. Nielsen, S. (Ed), Springer US, New York, NY, pp 117–132 doi: 10.1007/978-1-4419-1478-1

Book

1. Eitenmiller, R.R., Landen Jr., W.O., & Ye, L. (2007) *Vitamin Analysis for the Health and Food Sciences*, 2nd Ed. CRC Press, Boca Raton, FL. doi: 10.1201/9781420009750

Manuscript should be double-spaced, 12 pt, Times New Roman font or any true type font

Sample Paper: <https://doi.org/10.1093/jaoacint/qsaa080>

AOAC Official Method

1. *Official Methods of Analysis* (2019) 21st Ed., AOAC INTERNATIONAL, Rockville, MD, Method **2016.05**. www.eoma.aoac.org [accessed on May 25, 2019]

Standard

1. ISO (2018) Infant formula and adult nutritionals—Determination of vitamin D by liquid chromatography-mass spectrometry (ISO 20636:2018)

Webpage

1. Chromatography Today (2020) Can Chromatography Detect Coffee Adulteration?, <https://www.chromatographytoday.com/news/hplc-uhplc/31/breaking-news/can-chromatography-detect-coffee-adulteration/52087> [accessed 19 Nov 2020]

Dataset

1. Authors, Year, Title, Publisher (repository or archive name), Identifier

Figure Captions

Figure captions should be placed after the References.

Ensure that each figure has a caption comprising a brief title and a description.

Tables And Figures

Figures:

- Do not embed figures in the body of the text.
- Upload figures separately and clearly label each figure. Multi-paneled figures should be labelled clearly.

Tables:

- Do not embed the tables in the body of the text.
- Tables may be included at the end of the manuscript or placed in a separate document clearly labeled.
- All footnotes must be called out in the text using a superscript alpha character. (See Example below)

Table 2019.02A. Collaborative study results of MC-Media Pad RAC vs USDA MLG 3.02

Matrix	Lot	MC-Media Pad RAC				USDA MLG 3.02				Difference of means ^{b,c}	Difference of means, ^d 95% LCL, UCL
		<i>n</i> ^a	Mean, log ₁₀ CFU/g	S _r	S _R	<i>n</i> ^a	Mean, log ₁₀ CFU/g	S _r	S _R		
Raw ground pork (24 h)	Low	9	3.438	0.08	0.12	9	3.423	0.16	0.18	0.015	−0.038, 0.068
	Medium	9	4.768	0.07	0.14	9	4.754	0.09	0.16	0.014	−0.013, 0.042
	High	9	5.313	0.12	0.17	9	5.322	0.08	0.16	−0.008	−0.054, 0.037
Raw ground pork (48 h)	Low	9	3.465	0.09	0.13	9	3.423	0.16	0.18	0.042	−0.018, 0.101
	Medium	9	4.782	0.08	0.14	9	4.754	0.09	0.16	0.029	0.005, 0.052
	High	9	5.354	0.11	0.15	9	5.322	0.08	0.16	0.032	−0.001, 0.066

^a Number of laboratories that reported complete results.

^b Mean log₁₀ candidate method—mean log₁₀ reference method.

^c A 95% confidence interval for the true mean difference within ±0.5 indicates equivalence of the two methods.

^d 95% lower and upper confidence limits.