

# Information for Authors

THE AMERICAN JOURNAL OF CLINICAL NUTRITION

## STATEMENT OF SCOPE

The purpose of *The American Journal of Clinical Nutrition (AJCN)* is to publish original research studies relevant to human and clinical nutrition. Well-controlled clinical studies that describe scientific mechanisms, efficacy, and safety of dietary interventions in the context of disease prevention or a health benefit will be considered. Public health and epidemiologic studies relevant to human nutrition, and innovative investigations of nutritional questions that employ epigenetic, genomic, proteomic, and metabolomic approaches are encouraged. Solicited editorials, book reviews, solicited or unsolicited review articles, invited controversy position papers, and letters to the Editor that relate to prior *AJCN* articles are essential components of the *AJCN*. All submitted material with scientific content will undergo peer review by the Editors or their designees before acceptance for publication.

Symposia or workshop articles may be published as supplements to the *AJCN* and are funded by their sponsors. The *AJCN* welcomes queries about the publication of supplements. The *AJCN* uses a 2-part acceptance process for supplements. The first step involves editorial acceptance of the topic and content as provided by the symposium organizer; the following material should be sent to the Editorial Office at [dbier@nutrition.org](mailto:dbier@nutrition.org): title, location, and date of the meeting; the names and affiliations of potential guest editors; the sponsor(s) of the meeting; the sponsor(s) of the publication; and the agenda/program from the meeting along with the names of the speakers. The second step involves anonymous peer review of the individual articles. To be considered for publication, supplement articles must be received within 3 mo of each symposium or workshop. Each manuscript should not exceed 15 text pages, exclusive of tables, figures, and references; must adhere to *AJCN* style and format; and will be reviewed according to the same scientific standards used to evaluate original research articles.

## CRITERIA FOR MANUSCRIPT ACCEPTANCE

The *AJCN* can publish only about 20% of the more than 1800 original submissions received per year. Submitted manuscripts may be rejected without detailed comments after initial review by at least 2 *AJCN* editors if the manuscripts are considered inappropriate or of insufficient scientific priority for publication in the *AJCN*. All other manuscripts undergo a complete review by at least 2 consulting editors or other selected experts. Criteria for acceptance by the *AJCN* include originality, validity of data, clarity of writing, strength of the conclusions, and potential importance of the work to the field of clinical nutrition. Indicate explicitly in your cover letter what is truly new in the present work compared to work already published in the field. Because Cochrane assessments are now readily available on the web via PubMed, *AJCN* no longer considers it necessary to disseminate them by secondary publication in the Journal. Submitted manuscripts will not be reviewed if they do not conform to standard English usage and to the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals" (Internet: <http://www.icmje.org/>), which is also available free of charge from the Secretariat Office, *Annals of Internal Medicine*, American College of Physicians, Independence Mall West, Sixth Street at Race, Philadelphia, PA 19106-1572.

## SUMMARY OF REQUIREMENTS

Each manuscript component should begin on a new page in the following sequence:

Title page  
Abstract  
Text  
Acknowledgments  
References

Tables: each table on a separate page, complete with title and footnotes

Legends for figures

Figures

Identify on the title page the author who will be responsible for correspondence regarding the manuscript. The signed Authors' Statement and Copyright Release Form and copies of any documents granting permission needed to reproduce material in print and electronic form or to use illustrations of identifiable subjects should be scanned and e-mailed to [ajcnsubmit@nutrition.org](mailto:ajcnsubmit@nutrition.org). If scanning is not possible, then the Authors' Statement and Copyright Release Form and any necessary documents may be faxed to (301) 634-7892. Authors should keep copies of all submitted material.

The *AJCN* encourages authors to provide the names, fields of interest, addresses, telephone and fax numbers, and e-mail addresses of **4-6 unbiased and qualified potential expert** reviewers from outside the authors' institutions.

**All material to be considered for publication in a regular or supplement issue should be submitted electronically at the following website: <http://submit.ajcn.org>.** See "Tips for authors submitting manuscripts to the *AJCN*" for helpful advice regarding electronic submission.

Manuscripts will be considered with the understanding that no part has been published, simultaneously submitted, or already accepted for publication elsewhere, other than in abstract form. A health research reporting checklist must be included with the submission of every research manuscript. Papers will be screened for similarity to previously published papers using iThenticate. The Editor reserves the right to request a copy of the Institutional Review Board approval documents, data, or statistical analyses files upon which the paper is based.

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To prevent conflicts of interest from arising during the peer review process, the *AJCN* requires individuals who are asked to review a manuscript to decline the solicitation if they have a possible conflict of interest. For detailed guidelines, please see <http://www.nutrition.org/publications/guidelines-and-policies/conflict-of-interest/>.

## MAJOR SECTIONS OF THE AJCN

Editorials  
Review Articles  
Special Invited Articles, including Controversies and Perspectives  
Original Research Communications (including formal systematic review/meta-analysis)  
Letters to the Editor  
Book Reviews  
Books Received  
ASN Announcements  
Calendar of Events

Letters to the Editor that refer to a recent *AJCN* article must be received within 12 wk of the article's publication. Letters must be double-spaced, must include line numbers, should include a title page, should have no more than 10 references, and **should not exceed 1000 words**. All letters will be subjected to editorial review and decision before acceptance. The *AJCN* does not accept letters that are unrelated to a specific, recently published article; that contain extensive unpublished data; or that engage in personal slander or invective. Letters should be

submitted by e-mail to [ajcnsubmit@nutrition.org](mailto:ajcnsubmit@nutrition.org). All letters to the Editor and book reviews must include a conflict of interest statement.

## RESEARCH REGISTRATION

*AJCN* requires registration in an appropriate public trials registry of all clinical trials and observational studies that began after July 1, 2008. Such registries include ICMJE-approved public trials registries (<http://www.clinicaltrials.gov>, [www.anzctr.org.au/](http://www.anzctr.org.au/), [www.isrctn.org](http://www.isrctn.org), [www.umin.ac.jp](http://www.umin.ac.jp), [www.trialregister.nl](http://www.trialregister.nl)). It is highly desirable that studies begun before July 1, 2008 also be registered. Please report the study ID number and the website where the clinical trial is registered on the title page of the paper.

## REQUIRED CHECKLISTS

Depending on the design of the study, one of the health research reporting checklists referenced at the Equator Network (<http://www.equator-network.org/reporting-guidelines/>) must accompany each manuscript as “supplemental files” in the online manuscript submission system. Page or line numbers must be included to indicate where the checklist items are located in your paper. If none of the checklists apply, please explain in your cover letter why none is needed.

## FORMAT AND STYLE REQUIREMENTS

Articles are copyedited according to *AJCN* style policy, the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals,” and the style manual of the Council of Science Editors (Scientific style and format: the CSE manual for authors, editors, and publishers. 7th ed. Reston, VA: The Council, 2006).

### Authorship

#### *Scientific conduct*

Each author must have participated sufficiently, intellectually or practically, in the work to take public responsibility for the content of the article, including the conception, design, and conduct of the experiment, and for the data interpretation. An article with corporate (collective) authorship must specify the key persons responsible for the article; others contributing to the work should be recognized separately. The Editors may require authors to justify the assignment of authorship. All authors must sign a statement agreeing to all the requirements for authorship with the transfer of copyright ([http://www.ajcn.org/misc/Authors'\\_Agreement\\_Form.pdf](http://www.ajcn.org/misc/Authors'_Agreement_Form.pdf)).

A [Change in Authorship Form](#) must be submitted if an author's name is added to the manuscript, there is a change in the author order, or an author wishes to remove his/her name. In the last case, a letter requesting the removal of his/her name and signed by the author must accompany the form.

#### *Conflict of interest*

Authors must disclose in the Acknowledgment section any possible conflicts of interest. For detailed guidelines, please see <http://www.nutrition.org/publications/guidelines-and-policies/conflict-of-interest/>.

### Instructions for manuscript preparation

The manuscript should be formatted as follows: 216 × 279 mm (8½ × 11 in) or ISO A4 (212 × 297 mm), with margins of at least 2.5 cm; use double-spacing and 12-point type throughout. Do not justify the right margin. **The abstract and text pages should have consecutive line numbers in the left margin beginning in the abstract and ending before the reference section.** Number pages consecutively in the upper right-hand corner of each page, beginning with the title page. Foreign authors are advised to have their manuscripts reviewed by a scientific

colleague who is fluent in English so that the manuscripts will conform to US English usage and grammar.

### Title page

The title page should contain: 1) the title of the article, beginning with a key word if possible, with only the first letter of the first word capitalized; 2) the names of all authors (first name, middle initial, last name) and their departmental and institutional affiliations at the time the research was done. Indicate which authors are associated with which institutions by listing the appropriate author initials in parentheses after each affiliation listed. Please note that all authors' names should appear on the manuscript exactly as they should appear in PubMed if the paper is published. ASN will not replace files to correct author names once published. 3) The last name of each author for the purpose of PubMed indexing; 4) If an author has changed affiliations and wants this information to be included in the article, then this information should be included in a separate line on the title page. 5) disclaimers, if any; 6) the name, mailing address, telephone and fax numbers, and e-mail address of the author responsible for correspondence about the manuscript; 7) the name and mailing and e-mail addresses of the author to whom requests for reprints should be addressed or a statement that reprints will not be available from the author; 8) sources of support, including grants, fellowships, and gifts of materials (eg, chemicals, experimental diets); 9) a short running head of **not more than 50 characters** (count letters and spaces); 10) a list of abbreviations and their definitions for all abbreviations used in the text if there are 3 or more; and 11) information pertinent to any clinical trial registry in which the trial is registered.

### Abstract

A properly constructed and informative abstract is helpful for the initial editorial review of the submitted manuscript. Original research articles must include a structured abstract that contains no more than 300 words, is written **in complete sentences**, and includes the following headings:

**Background:** Provide 1 or 2 sentences that explain the context of the study.

**Objective:** State the precise objective, the specific hypothesis to be tested, or both.

**Design:** Describe the study design, including the use of cells, animal models, or human subjects. Identify the control group. Identify specific methods and procedures. Describe interventions, if used.

**Results:** Report the most important findings, including results of statistical analyses.

**Conclusions:** Summarize in 1 or 2 sentences the primary outcomes of the study, including their potential clinical importance, if relevant (avoid generalizations).

Review articles, special articles, and reports should include an unstructured abstract (no more than 300 words) that states the purpose of the article and emphasizes the major concepts and conclusions. Any abbreviations used in the abstract should be defined in the abstract at first mention.

### Text

Use active voice whenever possible. Use past tense when describing and discussing the experimental work on which the article is based. Reserve present tense for reference to existing knowledge or prevailing concepts and for stating conclusions from the experimental work. Clearly differentiate previous knowledge and new contributions. Do not use *level* when referring to a concentration. Use metric units of measure; SI units are no longer required.

The text of observational and experimental articles should be divided into sections with the following headings: Introduction, Subjects (or Materials, for cell or animal studies) and Methods, Results, and Discussion. Long articles may require subheadings within some sections. Authors should consult recent issues of the *AJCN* for guidance on the formatting of other types of articles, book reviews, and editorials.

## Introduction

Clearly state the purpose of the article. Summarize the rationale and background for the study or observation, giving only strictly pertinent references. Do not include methods, data, results, or conclusions from the work being reported. The Introduction should be limited to 1.5 manuscript pages.

## Subjects (or Materials) and Methods

Describe clearly your selection of the experimental and control subjects and provide eligibility and exclusion criteria and details of randomization. Describe the methods for, and success of, any masking (blinding) of observations. Report any complications of experimental treatments. Identify the methods, apparatus (manufacturer's name in parentheses), and procedures in sufficient detail to allow other researchers to reproduce the results. Define all group designations parenthetically at first mention [for example, "control (CON) and high-fat (HF) groups"] and include definitions for these abbreviations in the abbreviation footnote on the title page. Do not use trademark names, such as Teflon, as generic terms. Give references for established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; and describe new or substantially modified methods, giving reasons for using them and evaluating their limitations. Identify precisely all drugs and chemicals used, including generic names, dosages, and routes of administration. If trade names for drugs and chemicals are included, give the manufacturer's name and location.

**Ethics.** When reporting experiments on human subjects, indicate that the procedures followed were in accordance with the ethical standards of the responsible institutional or regional committee on human experimentation or in accordance with the Helsinki Declaration of 1975 as revised in 1983. Do not use patients' names, initials, or hospital identification numbers. When reporting experiments on animals, indicate approval by the institution's animal welfare committee and state whether the National Research Council's guide for the care and use of laboratory animals was followed.

**Statistics.** Describe statistical methods with enough detail to enable a knowledgeable reader with access to the original data to verify the reported results. When possible, quantify findings and present them with appropriate indicators of measurement error or uncertainty (eg, CIs, SDs, or SEs), even for differences that were not significant. Report the numbers of observations. Specify any general-use computer programs used, including the version number and the manufacturer's name and location. Include general descriptions of statistical methods in the Subjects (or Materials) and Methods section and specific descriptions in each table and figure legend. Indicate whether variables were transformed for analysis. Provide details about what hypotheses were tested, what statistical tests were used, and what the outcome and explanatory variables were (where appropriate). Indicate the level of significance used in tests if different from the conventional 2-sided 5% alpha error and whether or what type of adjustment is made for multiple comparisons.

When data are summarized in the Results section, specify the statistical methods used to analyze them. Avoid nontechnical uses of technical statistical terms, such as *random* (which implies a randomizing device), *normal*, *significant*, *correlation*, *sample*, and *parameter*. Define statistical terms, abbreviations, and symbols not listed under "Abbreviations for statistical terms" below. If there are 3 or more abbreviations used in the text, prepare an abbreviation footnote. The footnote should be associated with the first abbreviated term in the text and should be an alphabetized listing of all author-defined abbreviations and their definitions. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented as one or more appendixes.

## Results

Present your results in a logical sequence in the text, tables, and figures. Do not present specifics of data more than once and do not duplicate data from tables or figures in the text; emphasize or summarize only important observations. Do not present data from individual subjects except for very compelling reasons. Report losses to

observation (such as dropouts from a clinical trial). Use boldface for the first mention of each table or figure.

## Discussion

The Discussion should not exceed 4 typewritten pages except in unusual circumstances as approved by the Editor. Emphasize concisely the novel and important aspects of the study and the conclusions that follow from them. Do not repeat in detail data or other material given in the Introduction or Results. Include the implications of the findings and their limitations and relate the observations to other relevant studies. Link conclusions with the goals of the study and avoid unqualified statements and conclusions that are not completely supported by the data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses and recommendations when warranted by the results and label them clearly as such.

## Acknowledgments

Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name and for providing to the Editor a copy of the permission, if requested. Authors must disclose any financial or personal relationships with the company or organization sponsoring the research at the time the research was done. Such relationships may include employment, sharing in a patent, serving on an advisory board or speakers' panel, or owning shares in the company. If an author or authors have no potential conflicts of interest, please state this. The source of support for the research reported in the paper should be listed on the title page, not as an acknowledgement. Each author is required to list his or her contribution to the work.

## Authors' contributions to manuscript

A description of the contribution of each author must be provided in the Acknowledgment section. Please use the following descriptors: 1) designed research (project conception, development of overall research plan, and study oversight); 2) conducted research (hands-on conduct of the experiments and data collection); 3) provided essential reagents or provided essential materials (applies to authors who contributed by providing animals, constructs, databases, etc, necessary for the research); 4) analyzed data or performed statistical analysis; 5) wrote paper (only authors who made a major contribution); 6) had primary responsibility for final content; 7) other (use only if categories above are not applicable; describe briefly); 8) for single-authored papers, please state: The sole author had responsibility for all parts of the manuscript.

Please do not include "obtained funding" (the initials of authors who received grants may be included in the footnote regarding support on the manuscript's title page). Although not all manuscripts will necessarily include all descriptors, all manuscripts, including reviews, must indicate who is responsible for design, writing, and final content. An example of a properly formatted author contribution statement is as follows: "AX, RFG, and PGY designed research; RFG and QC conducted research; PT analyzed data; AX, PGY, and QC wrote the paper; PGY had primary responsibility for final content. All authors read and approved the final manuscript."

## References

Number references consecutively in the order in which they are first mentioned in the text. Identify references by Arabic numerals in parentheses. References cited in tables or in legends to figures should be numbered according to the first citation of the table or figure in the text. Appendixes should have a separate reference section.

It is rarely necessary to cite more than 50 references in an original research article. Try to avoid citing published abstracts as references [if a published abstract is cited, include "(abstr)" at the end of the reference]. Abstracts from scientific meetings not published in peer-reviewed journals may not be used as references. Unpublished observations and personal communications (written, not oral) may not be used as references but may be inserted in parentheses with the names of the responsible researchers and the year of the observation or communication. Authors are responsible for obtaining written

permission from everyone so cited and for providing to the Editor a copy of the permission, if requested. Doctoral dissertations may be used as references. Include manuscripts accepted but not yet published; designate journal name followed by "(in press)." Report foreign titles in the original language, identify the language, and provide the English translation in parentheses. The references must be verified by the author against the original documents.

#### Journals

1) Journal article with DOI: If an article has a DOI number ("digital object identifier" number unique to the publication), it may be included at the end of the reference.

Hamer M, Steptoe A. Prospective study of physical fitness, adiposity, and inflammatory markers in healthy middle-aged men and women. *Am J Clin Nutr* 2009;89:85-89. doi: 10.3945/ajcn.2008.26779.

2) Standard journal article: list all authors when 10 or fewer; when >10, list only the first 10 and add "et al." Abbreviate journal titles according to *Index Medicus* style, which is used in MEDLINE citations.

Jeffery RW, Wing RR, Sherwood NE, Tate DF. Physical activity and weight loss: does prescribing higher physical activity goals improve outcome? *Am J Clin Nutr* 2003;78:684-9.

3) Corporate author

National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) final report. *Circulation* 2002;106:3143-421.

#### Books and other monographs

4) Personal authors

Shils M, Shike M, Olson J, Ross AC. *Modern nutrition in health and disease*. 9th ed. Baltimore: Lippincott Williams & Wilkins, 1998.

5) Committee report or corporate author

National Research Council. *Recommended dietary allowances*. 10th ed. Washington, DC: National Academy Press, 1989.

Food and Nutrition Board, Institute of Medicine. *Dietary reference intakes for vitamin C, vitamin E, selenium and carotenoids*. Washington, DC: National Academy Press, 2000.

6) Chapter in book

Young VR, Tharakan JF. Nutritional essentiality of amino acids and amino acid requirements in healthy adults. 2nd. ed. In: Cynober LA, ed. *Metabolic and therapeutic aspects of amino acids in clinical nutrition*. Boca Raton, FL: CRC Press, 2004:439-70.

7) Agency publication

US Department of Agriculture, US Department of Health and Human Services. *Nutrition and your health: dietary guidelines for Americans*. Washington, DC: US Government Printing Office, 2000. [USDA Home and Garden Bulletin no. 232.]

#### Internet references

8) Website

National Center for Health Statistics. *National Health and Nutrition Examination Survey*. Version current 1 October 2003. Internet: <http://www.cdc.gov/nchs/nhanes.htm> (accessed 13 October 2003).

9) Online journal article

Sinha A, Madden J, Ross-Degnan D, Soumerai S, Platt R. Reduced risk of neonatal respiratory infections among breastfed girls but not boys. *Pediatrics* [serial online] 2003;112:e303. Internet: <http://pediatrics.aappublications.org/cgi/content/full/112/4/e303> (accessed 14 October 2003).

#### Tables

Tables must be included in the text file, and each table should begin on a new page. Double-spacing of tables is preferred but not required. Number tables consecutively with Arabic numerals (do not use IA, IB, etc) and supply a brief descriptive title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading or table title. Each table should contain enough detail

(including statistics) that the table is intelligible without reference to the text. All nonstandard abbreviations, including group designations, used in a table or table title should be defined in a footnote to the table title, and the abbreviations should be listed in alphabetic order. If the footnote to the table title contains multiple items, the definitions of the abbreviations should be the last item. If a table contains only one abbreviated term, then a separate footnote placed after that abbreviation should be used to define that term. Commonly used approved abbreviations (*see* "Units and Abbreviations" below) may be used without explanation. Additionally, explanations are not needed for ANOVA, BMI, F (females), and M (males). For footnotes, use superscript Arabic numerals. For reporting results of statistical analyses, superscript letters can be used if explaining the results in the usual manner would be too complicated (*see* a recent issue of the *AJCN* for examples). The first appearance in a horizontal row determines the order of the footnotes. Identify statistical measures of variation, such as SD and SE. **Omit internal horizontal and vertical rules.** Cite each table in the text in consecutive order. Use boldface for the first mention of each table. If you use data from another published source, acknowledge the source fully. Number references in tables according to the location of the first citation of each table in the text. For an illustrated table quality checklist, visit <http://pubs.nutrition.org/site/misc/ASNTTableChecklist.pdf>.

#### Figures

Cite each figure in consecutive order in the text. Use boldface for the first mention of each figure. Spell out the word "Figure"; do not use "Fig." If a figure has been published, acknowledge the original source and submit written permission from the copyright holder to reproduce or adapt the material in print and electronic format. Except for documents in the public domain, permission is required from the copyright holder, regardless of authorship or publisher.

Legends for all figures should be included within the manuscript text file on a separate page and be typed with double-spacing (legends should not be included on the figures themselves). Each legend should contain enough detail, including statistics, to make the figure intelligible without reference to the text. All nonstandard abbreviations, including group designations, used in a figure or figure legend (*see* below for list of standard abbreviations under "Units and Abbreviations") should be defined at the end of the figure legend in alphabetic order. When symbols, arrows, numbers, or letters are used to identify parts of the figures, identify and explain each one clearly in the legend. Explain internal scale and identify the method of staining in photomicrographs.

Lettering and symbols must be large enough to be readable when the figure is reduced to 1 column width (<8.5 cm) or, in rare cases, to 2 column widths. The use of color will be evaluated for each figure on an as-needed basis, and the author must pay an extra charge if color is used. Reprints of articles with color figures will be billed at a higher charge because of the additional costs of printing color. Do not use 3-dimensional figures unless necessary. When labeling axes, capitalize only the first word and proper nouns; use lowercase letters for the remaining words and put units in parentheses.

For an illustrated figure quality checklist, visit <http://pubs.nutrition.org/site/misc/ASNFigureChecklist.pdf>. For video on preparing digital images for publication, visit the *Preparing Digital Images for Publication* series at <http://pubs.nutrition.org/site/misc/Images-0.xhtml>.

#### Supplemental material

Supplemental material may be included with manuscript submissions. Supplemental files for upload may include required research checklists, articles published/in press elsewhere, reports or technical briefs related to manuscript submission, figure source files, questionnaires, permissions, videos, etc. All supplemental data should be clearly labeled either as "Supplemental Data for Reviewers Only" or as "Online Supplemental Material" if it is submitted for online publication only in *The AJCN*. Therefore, please upload supplemental files for review-only separately from supplemental files for online publication. Online Supplemental Material (OSM) is not edited before being posted online.

## UNITS AND ABBREVIATIONS

Use only standard abbreviations. Consult the following sources for standard abbreviations: *Scientific Style and Format* and *Standard for Use of the International System of Units (SI): the Modern Metric System* (American Society for Testing and Materials. IEEE/ASTM SI 10-1997. West Conshohocken, PA: ASTM, 1997) or [www.ieee.org/web/publications/PSPB/index.html](http://www.ieee.org/web/publications/PSPB/index.html). Avoid abbreviations in the title, and avoid the use of abbreviations for single words. Each abbreviation should be defined in the text at first mention. If there are 3 or more abbreviations used in the text, the title page of the manuscript should contain an alphabetized listing of all author-defined abbreviations and their definitions. The footnote should be associated with the first abbreviated term in the text. Note that group designations (for example, "CON" for "control") should also be included in the abbreviation footnote. Standard units of measurement, chemical compound preceded by a digit, and the following standard abbreviations do not require definition: ADP, AIDS, AMP, ASN, ATP, AUC, BMI, BOLD, CDC, CFU, CoA, CTP, DHA, DMEM, DMSO, DNA, EDTA, eg, EGTA, ELISA, EPA, FAD, FAO, FMN, fMRI, GAPDH, GDP, GTP, HCl, HDL, HEPES, HIV, HOMA-IR, HPLC, ie, Ig, IL, LDL, ln, LPS, MEM, MOPS, MRI, MUFA, *m/z*, NAD, NADH, NADP, NADPH, NHANES, NIH, PUFA, RNA, SDS-PAGE, SFA, TNF, tris, UDP, UNICEF, USDA, UTP, UV, VLDL, vol:vol, WHO, and wt:vol. These standard abbreviations, however, should be defined at first mention in the abstract.

### Abbreviations for statistical terms

analysis of variance, ANOVA  
analysis of covariance, ANCOVA  
coefficient of correlation, sample, *r*  
coefficient of multiple correlation, *R*  
coefficient of variation, CV  
confidence interval, CI  
degrees of freedom, df  
hazard ratio, HR  
interquartile range, IQR  
not significant, NS  
number of observations, *n*  
odds ratio, OR  
probability, *P*  
risk ratio, RR  
standard deviation, SD  
standard error of the estimate, SEE  
standard error of the mean, SEM  
variance ratio, *F*

Metric units are required and the use of the International System of Units (SI units) is optional. For a comprehensive listing of SI conversion factors, consult *SI Units for Clinical Measurement* (Young DS, Huth EJ. Philadelphia: American College of Physicians, 1998), *Am J Clin Nutr* 1998;67:166–81 or *J Nutr* 1990;120:20-35. Dosage forms and dietary ingredients may be expressed in gram or mole quantities. Energy may be expressed in kilocalories or joules; the conversion factor for converting kilocalories to kilojoules is 4.184. Do not report energy in Calories with a capital C; use kcal, MJ, or kJ instead. Temperatures should be reported in degrees Celsius. Blood pressures should be reported in millimeters of mercury. Use of katals to report enzyme activity is optional.

### Commonly used approved abbreviations

#### Standard units of measurement

ampere, A	liter, L
becquerel, Bq	meter, m
coulomb, C	minute, min
curie, Ci	mole, mol
day, d	month, mo
degree Celsius, °C	ohm, Ω
farad, F	pascal, Pa
gram, g	second, s
hertz, Hz	sievert, Sv
hour, h	volt, V

joule, J	watt, W
katal, kat	week, wk
kelvin, K	year, y
kilocalorie, kcal	

### Acceptable standard units

*length*: m, mm, μm  
*area*: m<sup>2</sup>, mm<sup>2</sup>, μm<sup>2</sup>  
*volume*: L, mL, μL, pL  
*mass*: kg, g, mg, μg, ng, pg  
*mass concentration*: kg/L, g/L, mg/L, μg/L  
*substance concentration*: mol/L, mmol/L, μmol/L, nmol/L

### Unacceptable units

*length*: not acceptable: in, ft, yd, Å, mμ  
*area*: not acceptable: sq in, in<sup>2</sup>, μ<sup>2</sup>  
*volume*: not acceptable: pint, gallon, cc, ccm, λ, μμL  
*mass*: not acceptable: oz, lb, gr, gm, gms, mgm, mgms, mgs  
*mass concentration*: not acceptable: mg %  
*substance concentration*: not acceptable: M, N

### Combining prefixes

tera- (10 <sup>12</sup> ), T	micro- (10 <sup>-6</sup> ), μ
giga- (10 <sup>9</sup> ), G	nano- (10 <sup>-9</sup> ), n
mega- (10 <sup>6</sup> ), M	pico- (10 <sup>-12</sup> ), p
kilo- (10 <sup>3</sup> ), k	femto- (10 <sup>-15</sup> ), f
milli- (10 <sup>-3</sup> ), m	atto- (10 <sup>-18</sup> ), a

## NOMENCLATURE

In general, the *AJCN* follows the nomenclature policies of the IUPAC-IUB Joint Commission on Biochemical Nomenclature. The vitamin nomenclature is summarized at *J Nutr* 1990;120:12-19, and the amino acid nomenclature is summarized at *J Nutr*. 1987;117:15. Both articles can be accessed at <http://jn.nutrition.org>. Authors are responsible for ensuring that their terminology conforms with these policies. For guidelines on gene and protein nomenclature, authors should consult the following websites:

<http://www.informatics.jax.org/> (mouse), <http://rgd.mcw.edu/> (rat),  
<http://www.genenames.org/> (human and other species), and  
<http://au.expasy.org/> (proteins).

As recommended by the American Society for Microbiology, the spelling of bacterial names should follow the *Approved Lists of Bacterial Names (Amended) & Index of the Bacterial and Yeast Nomenclatural Changes* (V. B. D. Skerman et al. ed., ASM Press, Washington, DC, 1989) and the validation lists and notification lists published in the *International Journal of Systematic and Evolutionary Microbiology* (formerly the *International Journal of Systematic Bacteriology*). Further information on currently approved bacterial names can be found at: Bacterial Nomenclature Up-to-Date ([http://www.dsmz.de/microorganisms/main.php?contentleft\\_id=14](http://www.dsmz.de/microorganisms/main.php?contentleft_id=14)) and at List of Prokaryotic Names with Standing in Nomenclature (<http://www.bacterio.cict.fr>). If authors must use a name that does not have standing in nomenclature, the name should be enclosed in quotation marks in the title, when appropriate, and at its first use in the abstract and the text. Correspondingly, an appropriate statement concerning the nomenclatural status of the name should be made in the text.

## MICROBIOLOGICAL CULTURE DEPOSITION

The Journal (*AJCN*) expects authors to deposit microbial strains used in any study to be published in publicly accessible culture collections, for example the American Type Culture Collection (ATCC) and to refer to the collections and strain numbers in the text (e.g. ATCC 53103). Since the authenticity of subcultures of culture collection specimens that are distributed by individuals cannot be ensured, authors should indicate laboratory strain designations and donor sources as well as original culture collection identification numbers. More information on the ATCC it is accessible at <http://www.lgcpromochem-atcc.com/>.

## MANUSCRIPT DIGITAL FILES

### Initial manuscript submissions

Prepare your manuscript, including figure legends and tables, in Word format. Tables must be included in the text file; do not submit tables in separate files. Submit each figure in a separate file. Preferred formats for image (figure) files are PDF and EPS. Files must conform to the minimum-resolution specifications listed below (*see* Image resolution). If you wish to include OSM (*see* Supplemental material) with your submission, it should be clearly labeled and marked with an “Online Supplemental Material” header on each page. Online-only figures and tables should be labeled “Supplemental Figure 1,” “Supplemental Table 1,” etc.

### Revised manuscript submissions

Submit manuscript text, including figure legends and tables, in a Word file; tables must be included in the text file; do not submit tables in separate files. Submit each figure in a separate file. Preferred formats for image (figure) files are PDF and EPS. Files must conform to the minimum-resolution specifications listed below (*see* Image resolution). Figures that are part of the regular manuscript submission and not part of OSM must be uploaded as separate files. OSM pages must be marked with an “Online Supplemental Material” header on each page. Online-only figures and tables should be labeled “Supplemental Figure 1,” “Supplemental Table 1,” etc. Upload the OSM in PDF format as supplemental file(s) in the upload area. OSM files will not be edited; therefore, please be sure that *The American Journal of Clinical Nutrition* format is used and that the files are accurate.

### Formatting

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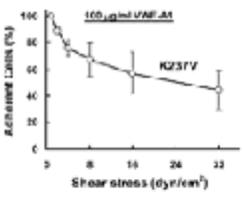
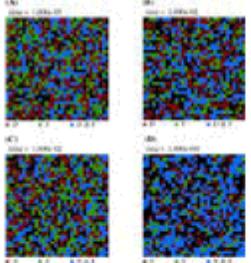
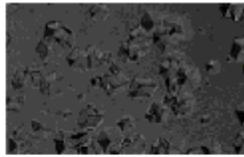
1) Do not use pattern or texture fills in graphics. Instead use solid fills or percentage screens that will be effectively converted to vector images during file conversion. 2) Artwork placed with any MS Office application should be of acceptable minimum resolution for print production (*see* “Image resolution”). 3) When inserting pictures or images into files, be sure to select “insert” and not “insert link,” which will not properly embed the hi-res image into the MS Office file. 4) Do not reduce or enlarge the images after placement within the MS Office file. Otherwise the image quality will be affected. 5) A separate file should be submitted for each figure. Make sure that any multi-panel figures (i.e., figures with parts labeled A, B, C, D, etc.) are assembled into one file. Rather than sending four files (Figure 1A, Figure 1B, Figure 1C, Figure 1D), the four parts should be assembled into one piece and supplied as one file.

### Image resolution

Files at publication size must conform to the minimum-resolution specifications listed in the figure below.

### Fonts

It is recommended to use standard fonts in order to avoid potential problems with font substitution or embedding problems. Acceptable fonts include Arial, Helvetica, Times Roman, Symbol, Mathematical PI, and European PI. All other fonts, if not embedded, may be replaced, resulting in data loss or realignment.

Line art	Combination Halftones (grayscale or color images and type)	Halftones (grayscale or color with no type or lettering)
		
1000 dpi	600 dpi	300 dpi

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### Additional information on preparing digital art files

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1) Each figure file should be clearly identified by a figure number and panel letter, if appropriate, in the space provided on the file upload screen. 2) If a figure is very small in the system-generated PDF file, the resolution of the figure file was not high enough. A higher resolution figure should be uploaded before the PDF is approved. 3) **Tables must be included in the text file;** do not submit tables in separate files.

**Authors are requested to create and keep high-resolution print copies of the figures, in the event that they are needed for publication purposes.**

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