



Cambridge Core

The new home of
Cambridge Journals
cambridge.org/core

Cambridge Core



CAMBRIDGE
UNIVERSITY PRESS



Life Sciences

Books and Journals from
Cambridge University Press

Cambridge is one of the leading publishers in ecology and conservation biology and publishes high quality texts and research across the breadth of the life sciences, focusing particularly on animal behaviour, biological anthropology, evolutionary biology, computational and systems biology, as well as statistics and professional development titles for biologists.

We also have an extensive portfolio of established journals in agriculture, ecology and conservation, and animal science.

For further details visit:

cambridge.org/core-life-sciences

Cambridge
Core



CAMBRIDGE
UNIVERSITY PRESS

Instructions to Contributors

Full Directions to Contributors, of which this is a summary, can be found at the following web site
http://titles.cambridge.org/journals/journal_catalogue.asp?mnemonic=dar

General

The *Journal of Dairy Research* publishes original scientific research on all aspects of the biology and technology of lactating animals and the foods they produce. Research Papers report innovative, hypothesis-driven research that is likely to have international impact. Research Communications are shorter and intended primarily for research of regional or technical impact. Reviews and Editorials are published by invitation. Material for publication should be submitted using the online submission system at www.journalofdairyresearch.org where you will also find further details of the *Journal's* scope, advice on preparing your manuscript and access to track your manuscript through Peer Review. Submission of a manuscript will be taken to imply that it reports original unpublished work, that it is not under consideration elsewhere, and that if accepted by the *Journal* it will not be published elsewhere in any language without the consent of the Editors. You will be asked to confirm that you accept these conditions. Your manuscript will be peer reviewed. If it is accepted for publication you will be asked to assign the copyright, under certain conditions, to the *Journal* to help protect your material.

Submission of manuscripts

Submission is online via www.journalofdairyresearch.org. The Editors no longer accept emailed submissions. You should first consult the online guidance and these Instructions to Contributors to ensure that your manuscript is prepared in accordance with the *Journal's* requirements. You must submit the manuscript as a single Word document that incorporates all tables and figures. If we subsequently require higher quality original files of figures or images we will ask you for them. You will also have the option to submit supplementary files.

Journal Scope

The *Journal's* ability to cover the entire dairy foods chain is a major strength. The remit spans from animal nutritional aspects of feed input through the biology of lactating animals and the mammary gland to milk quality, technological aspects of processed dairy products and healthy nutrition for the consumer. The focus is on dairy species, but we also welcome comparative research related to human lactation and lactation in non-dairy animal species. The *Journal* does not categorize published articles. Each issue will follow the dairy foods chain, starting with feeding-related research and ending with consumer-related.

Types of manuscript and general considerations

The *Journal* publishes submitted Research Papers and Research Communications. In addition, Research Reviews and Editorials are published by invitation. Research Papers report innovative hypothesis-driven research of international impact and will not normally be appropriate for research that is purely descriptive. Research Communications are shorter. In addition to international impact research, Research Communications can also report descriptive studies of Regional Interest or Technical Interest. Within the *Journal* there is no categorisation by article type, which must be briefly stated in the first line of the summary. Page limits apply to all types of manuscript. These are reported as Text Equivalents (TEQ) where one word is one TEQ and each figure or table is 250 TEQ. Research Papers should be around 6000 TEQ and should include only figures, tables and reference citations that are essential to the understanding of the research objectives. Research Communications should be around 2500 TEQ and should include only one or two tables or figures and a maximum of around 10 citations. Manuscripts that exceed these recommendations will be returned for revision.

Reviews and Editorials

These are invited, and separate guidance will be provided with the invitation. The Editors are always interested to receive suggestions for topics, with or without possible authors.

General style of all manuscripts

Please consult the online guidance and refer to a recent issue to familiarize yourself with *Journal* conventions and layout. Attention to these and other details will speed publication. Manuscripts should be written in UK English using the spelling of the Concise Oxford Dictionary and should as far as possible be comprehensible to the non-specialist reader. They should be concise and focused on the scientific objectives. Research Papers and Research Communications must contain sufficient detail or appropriate cited methodologies to allow repetition of the work. Formatting should include double spaced and consecutively numbered lines, standard margins and an appropriate font of appropriate size. Do not hyphenate words at the end of a line unless a hyphen is to appear in the printed text.

Layout of Research Paper manuscripts

The manuscript should generally be divided as follows:

- **Cover sheet** should give the title of the article, names of the authors each with one forename, together with their affiliations, a shortened version of the title suitable as a heading, and the name, address and email of the author to whom correspondence and proofs should be sent.
- **Summary**, preferably not more than 300 words, should encapsulate the whole paper, showing clearly the new knowledge acquired. Individual results should not be given. The first line of the summary should identify the article as a Research Paper and present the objectives, preferably in the form of a hypothesis (eg *This Research Paper addresses the hypothesis that...*)
- **Keywords**: up to 5 keywords may be supplied
- **Introduction** should not have a heading. It should not contain a full review of the literature, but should help the non-specialist to understand why the subject of enquiry is interesting or important, why the authors have chosen the approach described and what the likely impact of the research will be. The objectives must be clearly stated, preferably in the form of a hypothesis.
- **Materials and Methods** section should contain adequate descriptions of procedures or appropriate references; sources of all materials (including address, with postal code) and sources or strains of animals and microorganisms should be indicated. Do not give detailed descriptions of published methods; refer to the original publication.
- **Results** should be as concise as possible, without repetition or inclusion of irrelevant material. Tables and illustrations should be used efficiently. All data reported must directly relate to the understanding of the research objectives. Supporting or confirmatory data should be presented separately as Supplementary Files.
- **Discussion** should not repeat the results but discuss their significance. Refer to existing or accepted knowledge in the present tense and the authors' work in the past tense; the difference in tense should clearly show the authors' contribution. A separate conclusion is not necessary but authors should summarize their main conclusions briefly at the end of the Discussion. A combined Results and Discussion is acceptable but not preferred.
- **Acknowledgements** of financial support, technical assistance and so on are given in a separate paragraph without heading. It is the responsibility of the authors to ensure that individuals or organizations acknowledged as providing materials or otherwise are willing to be identified.
- **References** must be consistent and must use the style described below.
- **Tables** and table legends, following the style described below.
- **Figure legends** sufficient to allow the figure to be understood without reference to the text
- **Figures** should be produced using an editable software and copied into the Word document.

Please remember that the complete manuscript should be submitted as a single document.

Layout of submitted Research Communication manuscripts

In general, follow the same format and layout as for a Research Paper. The introduction will typically be shorter and the results and discussion are more likely to be combined into one section. The number of citations will be less, and presentation of data should be restricted to one or two figures and tables. The *Journal* does not accept research papers that have been published elsewhere. The *Journal* is published online by Cambridge University Press.

The Summary should start with a sentence clearly identifying the article type and presenting the objectives (eg *This Technical Research Communication describes...*)

References

Refer to a recent issue and ensure that your reference citations comply with *Journal* style. References should be given in the text as Brown & Jones (1987) or (Schmidt, 1985; Nakamura et al. 1989); the first author with et al. is used for papers with three or more authors. Where necessary, papers are distinguished as Lenoir (1988a), (Litov et al. 1990a, b). When several references appear together in the text, cite them in chronological order, and alphabetically within years. The Reference list at the end of the paper, which should begin on a fresh page, is given in strict alphabetical order and uses the minimum of punctuation. Each reference should contain authors' names, with initials (in capitals), the year, the title of the paper, the name of the journal in full, the volume and the page range. Titles of articles originally published in another language should be given in English translation, and this indicated by the use of square brackets. References to books should include the town of publication and the publisher, with editor(s) and volume and edition number where appropriate. Unpublished work should be given in the text (use authors' initials and surname) and not in the Reference list. You are reminded that it is your responsibility to check all references.

Data presentation

Choose the most economical form of data presentation, remembering that this could include data presented briefly in the text. For investigative research, avoid large tables and figures that are comprised mainly of data that do not differ significantly between treatments. For descriptive research, consider the use of Supplementary Files for all apart from the most important observations.

Tables

Tables should be numbered and carry headings enabling them to be understood without reference to the main text. Any abbreviations should be defined. Each Table should be typed separately at the end of the main text, but their approximate position should be indicated by a marginal mark (eg *Table 1 near here*). Symbols for footnotes should avoid use of *, **, etc, which should be used to indicate levels of significance.

Figures and Illustrations

Figures should be numbered and the combination of figure and legend should be comprehensible without reference to the main text. Figures must be prepared using an editable file format and then copied into the Word document. Data points should be indicated by clearly distinguishable symbols. Illustrations such as photographic images should be accompanied by a legend as above, with scale bars if appropriate. Colour figures and artwork submitted to the *Journal* will be published online free of charge. If you request colour figures in the printed version, you will be contacted by CCC-Rightslink who are acting on our behalf to collect Author Charges. Please follow their instructions in order to avoid any delay in the publication of your article.

Colour reproduction

To optimize the online colour reproduction, you will be given the opportunity to submit a colour graphic as either TIFF or EPS file, together with further instructions. It is your responsibility to ensure that any figures provided for colour online will reproduce well when converted to black and white for the print version.

Statistical treatment

Authors should, where possible, discuss their work with a statistician at an early stage and give attention to sample size. Individual results should not normally be given. The methods of statistical analysis should be clearly described; a suitable reference is adequate. Authors should make it clear whether they are quoting SED, SEM, SD, SE and so on. Any statement that two groups of values are different should be supported by the level of significance involved. Differences should not be claimed or implied if $P > 0.05$.

Gene Sequences

Original DNA sequences reported in the *Journal* must also be submitted to GenBank. Instructions can be found at <http://www.ncbi.nlm.nih.gov/Genbank/index.html>

Ethics of experiments

All research published in the *Journal* must comply with the locally-applicable ethical legislation or codes for animal or human research, and there must be a clear statement detailing that compliance.

Units

SI and commonly-used non-SI metric units should be used whenever possible. Solutions may be reported in terms of molarity (M) or as mol/l, providing there is consistency and no ambiguity. Give compositions based on mass or volume as (e.g.) mg/l or mg/kg and not percentage. Report all details of buffers etc that would be required for repetition. Normality should not be used.

Microorganisms

The organism should be described unambiguously, with genus, species and subspecies (if any) in italic and strain number or source in roman. Usage should conform to current international rules. Shortened forms or synonyms may be used after the first mention if desired.

Chemical formulae

These should be unambiguous. It is permissible but not required to use symbols for inorganic formulae.

Enzymes

The recommendations of the International Union of Biochemistry (*Enzyme Nomenclature*, 1984, London: Academic Press) should be followed, and the EC number given where known.

Other nomenclature, symbols, abbreviations and conventions

Authors should consult a current issue for guidance. Useful information on biochemical nomenclature and permitted acronyms can be found in *Biochemical Journal* **169**, 11-14 and on nutrient nomenclature in the *British Journal of Nutrition*. If authors use other abbreviations or acronyms, they should be defined at first mention, and their number restricted to ensure that the text is readable. Always use Arabic numerals with units; otherwise use words for 1-10 and figures for more than 10, (e.g. 3 weeks, three cows, 34 sheep) but avoid mixed lists. Time should be given by the 24 h clock, e.g. 14.15, without h or hours.

Revision of papers

If a paper is returned to authors for possible amendment or revision, a period of 4 months will normally be allowed. The editors are ready to consider a revised or rewritten paper at any time, but after 4 months it will be considered a new paper and given a new submission date.

Proofs

Authors will be advised when to expect proofs, which should be returned without delay following the instructions supplied at the time. Proofs are sent for the correction of any printer's or editorial errors, not for addition of new material or revision of the text. Excessive alteration may have to be disallowed or made at the authors' expense, and may delay publication. Order forms for paid offprints are sent with proofs and should be returned directly to Cambridge University Press following the instructions supplied at the time.

Cambridge Journals Language Editing Service

Cambridge recommends that authors have their manuscripts checked by an English language native speaker before submission; this will ensure that submissions are judged at peer review exclusively on academic merit. We list a number of third-party services specialising in language editing and / or translation, and suggest that authors contact us as appropriate. Use of any of these services is voluntary, and at the author's own expense. <http://journals.cambridge.org/action/stream?pagelid=8728&level=2&menu=Authors&pagelid=3608>

Journal of Dairy Research

CONTENTS

- **Editorial: Hypothetically speaking**
CH Knight 117
- **ORIGINAL ARTICLES**
- **Altered gene expression of epigenetic modifying enzymes in response to dietary supplementation with linseed oil**
R Li and EM Ibeagha-Awemu 119
- **Presence of *Mycobacterium avium* subs. *paratuberculosis* DNA in milk used to feed calves in Portugal**
C Leão, A Botelho, E Martins, C Aguiar, I Rebelo, T Nunes and R Bexiga 124
- **Probiotic supplementation effects on milk fatty acid profile in ewes**
S Payandeh, F Kafizadeh, M Juárez, MA de la Fuente, D Ghadimi and ALM Marín 128
- **Towards practical application of sensors for monitoring animal health: the effect of post-calving health problems on rumination duration, activity and milk yield**
M Steensels, E Maltz, C Bahr, D Berckmans, A Antler and I Halachmi 132
- **Towards practical application of sensors for monitoring animal health; design and validation of a model to detect ketosis**
M Steensels, E Maltz, C Bahr, D Berckmans, A Antler and I Halachmi 139
- **Fitting milk production curves through nonlinear mixed models**
M Piccardi, R Macchiavelli, AC Funes, GA Bó and M Balzarini 146
- **Composition and enzymatic activity in bulk milk from dairy farms with conventional or robotic milking systems**
M Johansson, Å Lundh, R de Vries and KS Sjaunja 154
- **Effect of g.9476869G>A myeloperoxidase (MPO) gene polymorphism on the antioxidant activity of milk from Polish Holstein-Friesian cows of the Black-and-White variety (HO)**
J Pokorska, K Poskart, D Kulaj, A Ochrem, M Dusza, Z Gil, E Świętek and J Makulska 159
- **Molecular characterisation, genetic variability and detection of a functional polymorphism influencing the promoter activity of *OXT* gene in goat and sheep**
G Cosenza, M Iannaccone, BA Pico, D Gallo, R Capparelli and A Pauciuolo 165
- **A novel polymorphism in the oxytocin receptor encoding gene (*OXTR*) affects milk fatty acid composition in Italian Mediterranean river buffalo**
G Cosenza, NPP Macciotta, A Nudda, A Coletta, L Ramunno and A Pauciuolo 170
- **Proliferation-apoptosis balance in *Staphylococcus aureus* chronically infected bovine mammary glands during involution**
CS Andreotti, EAL Pereyra, SC Sacco, C Baravalle, MS Renna, HH Ortega, LF Calvino and BE Dallard 181
- **Comparison of the immune responses associated with experimental bovine mastitis caused by different strains of *Escherichia coli***
SE Blum, ED Heller, S Jacoby, O Krifucks and G Leitner 190
- ***In vitro* ability of mastitis causing pathogens to form biofilms**
S Schönborn, N Wentte, J-H Paduch and V Krömker 198
- **Characterisation of penicillin and tetracycline resistance in *Staphylococcus aureus* isolated from bovine milk samples in Minas Gerais, Brazil**
CL Martini, CC Lange, MAVP Brito, JB Ribeiro, LC Mendonça and EK Vaz 202
- **Differences in sheep and goats milk microbiological profile between conventional and organic farming systems in Greece**
E Malissiova, T Papadopoulos, A Kyriazi, M Mparada, C Sakorafa, A Katsioulis, A Katsiaflaka, M Kyritsi, A Zdragas and C Hadjichristodoulou 206
- **Rapid discrimination between buffalo and cow milk and detection of adulteration of buffalo milk with cow milk using synchronous fluorescence spectroscopy in combination with multivariate methods**
SD Velioğlu, E Ercioğlu and IH Boyacı 214
- **Effects of heating and calcium and phosphate mineral supplementation on the physical properties of rennet-induced coagulation of camel and cow milk gels**
M Kamal, M Foukani and R Karoui 220
- **Effect of homogenisation in formation of thermally induced aggregates in a non- and low- fat milk model system with microparticulated whey proteins**
IC Torres, G Nieto, T Nylander, AC Simonsen, A Tolkach and R Ipsen 229

Content alerts

Register online to receive free content alerts
[cambridge.org/dar-alerts](https://www.cambridge.org/dar-alerts)



MIX
Paper from
responsible sources
FSC® C007785

CAMBRIDGE
UNIVERSITY PRESS