

Writing guidelines for scientific texts

Table of contents

- 1 Underlying rules and regulations
 - 1.1 General language
 - 1.1.1 Highlighting of words, etc.
 - 1.1.2 Quotation marks
 - 1.1.3 Footnotes
 - 1.1.4 -ise or -ize
 - 1.2 Scientific and technical units
 - 1.3 Anatomical terms
- 2 Foreign expressions
 - 2.1 General information
 - 2.2 Italics
- 3 Use of hyphens
- 4 Use of en dashes (–)
- 5 Greek letters
- 6 Use of abbreviations and acronyms
 - 6.1 Nontechnical language
 - 6.2 Technical language
- 7 Writing numbers in running texts
- 8 Punctuation
- 9 Vertical lists
- 10 Figures and tables
- 11 Trademarks
- 12 Descriptions of dosages and appliances
 - 12.1 Dosages
 - 12.2 Appliances
- 13 Use of spaces/special characters
 - 13.1 Numbers and special characters such as /, %, §, €
 - 13.2 Numbers and units such as g/mol, mg, °C, kcal, ml/min, µ/ml, cm³; etc.
 - 13.3 Abbreviations in running texts
 - 13.4 Ellipsis
 - 13.5 Equations and calculations
 - 13.6 Numbers, amounts of money, time and date
- 14 Source citation
 - 14.1 Citation of sources in running texts
 - 14.2 Reference lists

Please note that the rules given in these writing guidelines are mandatory for all types of books, journals, presentations and digital media. Thank you.

1 Underlying rules and regulations

The latest version of the cited reference materials should always be used.

1.1 General language

The form of English to be used is British English (BE), otherwise known as United Kingdom Standard English (UKSE). The latest version of one of the authoritative dictionaries should be used with respect to the spelling of general English words; e.g. the Oxford English Dictionary, Longman Dictionary of Contemporary English, Chamber's Dictionary or Collins Dictionary.

For specific veterinary terminology, the latest version of Saunders Comprehensive Veterinary Dictionary by Blood and Saunders should be consulted.

It should be ensured that a **uniform spelling** is used throughout the whole publication.

1.1.1 Highlighting of words, etc.

Highlighting in texts should only be done using **bold** type. The general rule is to use highlighting as little as possible.

1.1.2 Quotation marks

Quotes taken from text or speech should be written between typographic quotation marks: "...".

1.1.3 Footnotes

Footnotes should not be used in journal contributions. Instead, any details or further information should be integrated in the running text.

1.1.4 -ise or -ize

Both of these spelling conventions are used in British English, however, please use the -ise form consistently throughout the manuscript; for example,

realize	→	realise
organize	→	organise
organization	→	organisation

1.2 Scientific and technical units

Scientific and technical units should be used uniformly and the new SI units ([Système International d'Unités](#)) based on the metric system should be utilised where possible. Older units can be added in round brackets where necessary.

1.3 Anatomical terms

The terminology should comply with the World Association of Veterinary Anatomists' [Nomina Anatomica Veterinaria](#) (NAV). Anatomical terms should be given in English where possible and written in full, unless the paper is a specialist anatomy paper.

The following anatomical features should be abbreviated where possible.

artery, arteries:	a., aa.	vein, veins:	v., vv.
muscle, muscles:	m., mm.	ligament, ligaments:	lig., ligg.
nerve, nerves:	n., nn.	ramus, rami:	r., rr.

All other anatomical expressions should be written out in full.

2 Foreign expressions

2.1 General information

Where possible the English names for institutions etc., should be used. However, if foreign expressions or names are used, then either the English name should be given in round brackets next to it or an explanation of the term should be given in English; for example:

The new regulations were put forward by the *Bundestierärztekammer* (German Federal Chamber of Veterinarians).

The first signs of disease were seen in the livery stables *Schmidts Mietstall*.

2.2 Italics

The names of genes, micro-organisms, genera, species and subspecies are written in **italics**; whereas family, order and serovars are **not italicised**.

Latin and other foreign terms are **italicised**.

N.B.: In vitro and in vivo are **not italicised**.

3 Use of hyphens (-)

The basic rules for the use of hyphenation should be taken from the Oxford English Dictionary (cf. <https://en.oxforddictionaries.com/punctuation/hyphen>).

Hyphens should also be used if there is a danger of misunderstanding. For example:

extra curricular activities (additional activities within a specific curriculum) versus
extra-curricular activities (activities outside of a specific curriculum)

reform (to improve by change) versus re-form (to form again)

N.B.: The use of hyphens should be **standardised** throughout the text. For example, nonsteroidal anti-inflammatory agents or non-steroidal anti-inflammatory agents.

4 Use of en dashes (–)

- Between numbers to mean “to”: 5–8 mins (no spaces)
- As a dash: ... the best method of application – s.c., i.m. or i.v. – should be chosen... (a space should be placed before and after each en dash)

5 Greek letters

Greek letters are normally used as characters in connection with chemical substances and in certain compound nouns:

- γ -aminobutyric acid
- β -receptor antagonism
- β -blocker
- β -receptors
- γ 1-globulin

If the Greek letter is used as a generic term, then the letter can be written as a word; for example, beta blocker or alpha receptors. Greek letters are always written as a word in the names of diseases: gammaglobulinaemia.

6 Use of abbreviations and acronyms

An excessive use of abbreviations and acronyms causes difficulty in understanding and fluidity of reading, therefore they should be used sparingly. They should only be utilised when they are generally known or customarily used in nontechnical or technical terminology; for example, i.e., e.g., etc., viz., ECG, CT.

6.1 Nontechnical language

Please use nontechnical abbreviations and acronyms in a uniform manner and not at the beginning of a sentence.

6.2 Technical language

- Abbreviations of technical terms are always explained in the manuscript where they are first mentioned; for example, positron emission tomography (PET).
- However, if the abbreviation is written in association with another word, then the explanation is given after the abbreviation; for example, PET investigation (PET: positron emission tomography).
- Common abbreviations such as ECG, CT, etc. do not have to be explained.
- The methods of applying medication should be abbreviated wherever possible: amp., cap., supp., tab., i.v., i.m., s.c., p.o.

Exception: If the publication is more like a report and such terms are used only rarely in the running text, then the application methods should be written in full.

In consultation with the publishers, a separate list of abbreviations/acronyms can be compiled for a specific publication when necessary.

7 Writing numbers in running texts

The numbers one to twelve are written in full when used in running text; for example,

- the five-year-old stallion
- three samples
- ten days

However, all numbers used in connection with SI units or dosages are written as numerals; for example,

- 5 mg twice daily
- 1-ml syringe
- 5%

N.B.: There is no space between the numeral and the percent sign in English: 90%.

Decimal numbers in English should always be written with a full stop (period) and not a comma; for example,

- 31.47 not 31,47

An en dash should be used in connection with numbers to mean “to”:

- 5–7

Angle degrees are always written with numerals but with no space between the numeral and degree sign: 90°.

Degrees Celsius are always written with numerals with a non-breaking space between the numeral and °C: 25 °C. For the use of non-breaking spaces, cf. Section 13.

Roman numerals are used to enumerate

- Vertebrae, Ribs, Fingers, toes, carpals, tarsals
- (CNS) nerves
- Ventricles
- Milk teeth
- ECG leads, AV-Block grades, etc.
- Blood clotting factors

- Antithrombin types
- Burns

Arabic numerals are used to enumerate

- Intercostal spaces
- Vertebral discs
- Regions of the brain
- Permanent teeth
- Chromosomes
- Heart sounds
- TNM classification: T1 (numbers not subscript)
- AO classification
- Vitamins (e.g. Vit. B₁₂) (numbers subscript)
- Homeopathic potencies: C 100 (numbers not subscript and with a non-breaking space between letter and numerals)

8 Punctuation

Commas, semicolons and colons: The rules given by latest version of the Oxford English Dictionary should be used (cf. <https://en.oxforddictionaries.com/punctuation>).

Brackets, parentheses and braces in texts: If parentheses (round brackets) are used at the end of a sentence, the full stop should be placed outside it to the right as the final punctuation mark. If the parentheses contain a complete sentence, then the full stop should be placed to the left of the closing symbol.

If brackets, parentheses or braces need to be used within each other, then the following organisation should be used: [()] or {{(}}).

Units: Round or square brackets are not used around units in English: 20 mmol, not 20 [mmol].

9 Vertical lists

Bulleted vertical lists have no end punctuation unless the items form a complete sentence. For example,

General signs:

- pale mucous membranes
- severe halitosis
- hair loss

The food additive may not

- have an adverse effect on animal health, human health or the environment,
- change the taste of the food, or

- be advertised with price cuts.

10 Figures and tables

There is a full stop at the end of each complete sentence in the legends for figures and tables. However, there is no full stop after an incomplete sentence or a single-word legend; for example,

Figure 1: Dalmatian

Figure 2: The dog follows the bitch.

All symbols and abbreviated labels used in a figure have to be explained in its legend.

N.B.: Table is **not** abbreviated in English.

Important

- The **source (copyright)** must be cited at the end of the legend of every figure (Photo: Name of person or institution). In books, this only holds true for figures from other authors.
- The **printing permission** (“Authorisation for the use of illustrations and photographs”) of the copyright holder for all illustrations (photographs/diagrams) that have not been produced by the publication’s author(s) must be enclosed when submitting the publication. Please fill in the form available [here](#).

11 Trademarks

Officially registered products, methods, substances, devices etc. are either never or always annotated with superscripted trademark (TM,[®]) or service mark (SM) signs (e.g. ClorexydermTM).

12 Descriptions of dosages and appliances

12.1 Dosages

In journal articles, the dosages of all preparations used should be given as per kilogram body weight, then the active ingredient followed by the method of application. This is then followed by the complete description of the preparation, the licence holder and the country of origin (abbreviated) all written within round brackets.

The abbreviation “kg bw” or the term “per kg body weight” is therefore no longer necessary.

Example: 0.0125 mg/kg butorphanol i.v. (Torbugesic[®] Vet., Zoetis, D)

Please do not use the abbreviations q.d., b.i.d., t.i.d., q.i.d for dosage frequency. Instead, the frequency of application should be given as once daily, twice daily, three times daily or four times daily, respectively.

In book publications, the naming of the preparation's producer is not mandatory and should only be done after consultation with the editing department. This is because books are sold over a longer period of time and the licencing situation can change.

12.2 Appliances

With appliances, when first mentioned, please give the appliance's name and then in round brackets, the producer's name and where the company is registered [town and country (again in abbreviated form)].

Example: EquiVeo™ video endoscope 1.5 m x Ø 6 mm (Karl Storz SE & Co. KG, Tuttlingen, D)

13 Use of spaces/special characters

A non-breaking space prevents an automatic line break occurring between words. It also prevents the separation of words in justified text.

Tip: In Word, a non-breaking space is inserted using Ctrl + Shift + spacebar.

13.1 Numbers and special characters such as /, %, §, €

- There is no space before % (e.g. 35%).
- There is a non-breaking space after § (section or paragraph) and after its plural §§ (e.g. § 16, §§ 9 and 10).
- There is a non-breaking space between the numeral and the currency symbol when monetary values are given (e.g. € 5).
- No spaces are used before or after a forward slash (he/she), or before or after round brackets that enclose a word element; e.g., veterinarian(s).

13.2 Numbers and units such as g/mol, mg, °C, kcal, ml/min, µ/ml, cm³, etc.

There is always a (non-breaking) space between numbers and their units; for example: 3 mg, 95 °C.

13.3 Abbreviations in running texts

There is always a (non-breaking space) after an abbreviation; for example, Para. 4, p. 236, DIN A4, Fig. 1, Prof. King.

13.4 Ellipsis

- An ellipsis consists of three dots.
- An ellipsis is used when a word or line is omitted from a quoted passage. A space should be left between the ellipsis and the word written before or after it; for example, "The dosage was found ... to be inadequate for fatteners."
- An ellipsis is never preceded or followed by a full stop unless the ellipsis represents an omission between two complete sentences. For example:

“Some organic sector bodies prohibit nose-ringing of sows to preserve pasture, as this restricts the sows’ behaviour. ...Other farmers use a rotation system where the sows are moved every four months.”

13.5 Equations and calculations

There is a (non-breaking) space both before and after the mathematical signs used in equations or calculations; for example, $9 - 6 = 3$

+ (plus), - (minus), = (equals), \neq (does not equal), $<$, \leq (smaller than and less or equal), $>$, \geq (larger than and larger or equal), \div (divided by), \times (multiplied by)

N.B.: The minus and multiplication signs are (special) mathematical symbols that are included in the special character list. The minus sign should be used without a space before the numeral in negative numbers: $-8\text{ }^{\circ}\text{C}$.

13.6 Numbers, amounts of money, time and date

Three-digit numbers and higher are written with a comma after every three digits counting from the right; for example: 3,450 kg, 10,000 million, 145,978 km. The exceptions are **postal/zip codes** (e.g. 30173 Hannover) and **page numbers**.

Furthermore,

- The **monetary sign** is placed on the left in English; e.g. € 19.80, US \$ 39.00, £ 100.
- When writing the **time**, a full stop is used to separate the hour from the minutes; e.g. 18.59, 7.30 a.m., 7.30 p.m., 12 o'clock.
- **Date:** the day and year are written in numerals but the months are written in full in running text; e.g., 27 May 2017. Numerals are also used to express years or decades; e.g. 2002, the 1990s (*not* the 90's or 1990's)
- **Telephone numbers** are written without parentheses. A space is inserted between the access code/code number of the network provider, the local area code, and the phone number. The extension number is separated by a hyphen:
National telephone numbers: Tel. 0351 1221 295-250, Fax 0351 1221 295-250
International telephone numbers: Tel. +49 351 1221295-250, Fax +49 351 1221295-250

14 References

14.1 Citation of sources in running texts

All the sources cited in the text must be included in the reference list and vice versa. In addition, please take note of the following instructions.

- Any sources given in the running text may not be represented by a number but always by the author's surname(s) and year in round brackets.
- There is **no comma** between the author and the year (Meyer 2018).

- A list of citations in the running text is arranged **chronologically** according to publication year.
- When more than one source is being quoted, then the rule is a **comma** should be placed between the individual sources **not a semicolon**; for example, (Meyer 2018, Adam 2019, Müller 2020).
- When an author is cited by name in the text, the year of publication is written in round brackets next to it: "... according to Müller (2004)".
- If there are two authors then their names are joined with an "and", but with three or more authors, the first author is named and the rest are summarised using "et al." For example, (Müller and Frank 1995, Meyer 2003, Albrecht 2018, Schmitz et al. 2019).

14.2 Reference lists

The reference list is organised **alphabetically** according to the first letter of the first author's surname.

- **All** the authors of a source must be listed using their surnames followed by their initials.
- There is **no** comma between the surname and initials.
- Each of the author's names are separated by a comma, even the last one (**no** "and" is to be used here).
- An en dash (–, without spaces) is used between the page numbers, not a hyphen (-).
- Please remove all field functions that may be present (e.g. End Note or other bibliographic citation management software functions, etc.).
- Please use only official abbreviations for the title of the publication according to Medline (available in the internet under www.ncbi.nlm.nih.gov or [here](#)). Do not use any full stops in the abbreviation.
For example, Journal of the American Veterinary Medical Association should be written as J Am Vet Med Assoc.
- The edition number of a book is first given from the second edition onwards.
- When citing websites, please always give the URL and the last access date (accessed DD.MM.YYYY).

Examples of the method of citation of different types of sources in the reference list.

- **Journal article**
Gais K, Schäfer I, Kohn B (2020): Hyperkalzämie infolge einer Vitamin-D-Intoxikation bei einer Katze. Kleintierprax 65: 64–74.
- **Book chapter**
Schöning B (2020): Verhaltensauffälligkeiten von Seniorhunden. In: Solms P (ed.), Verhaltensprobleme beim Hund. Von den Grundlagen bis zum Management. 2nd ed. Schlütersche, Hannover, 196–213.
- **Book**
Sinowatz F, Rodler D (2019): Histologie in der Tiermedizin. Grundlagen, Techniken, Präparate. Schlütersche, Hannover.

schlütersche

- **Dissertation**
Heide C (2017): Larvenmehl von *Hermetia illucens* als Proteinträger im Futter für Hunde. Berlin, FU, Faculty of Veterinary Medicine, Diss.
- **Conference proceedings**
Reusch CE (2010): Trilostan – Übersicht über eine Erfolgsgeschichte. Proceedings of the 35th World Small Animal Veterinary Association Congress, Geneva, Switzerland, June 2–5, 2010.
- **Online-Publication (e-pub)**
Weich K, Hohlbaum K, Zintzsch A (2020): Belastungsbeurteilung im Tierversuch – ist das eigentlich ethisch? Berl Münch Tierärztl Wochenschr 133: DOI 10.2376/0005-9366-19060.
- **Law**
German Animal Welfare Act (2006): German Animal Welfare Act in the version of the publication of 18 May 2006 (Federal Law Gazette I pp. 1206, 1313), last amended by Article 101 of the Act of 20 November 2019 (Federal Law Gazette I p. 1626). <http://www.gesetze-im-internet.de/tierschg/BJNR012770972.html> (accessed DD.MM.YYYY).
- **Web sites**
German Society of Veterinary Medicine (DVG) (2020): DVG-Desinfektionsmittellisten. DVG-geprüfte Desinfektionsmittel für den Einsatz in der Tierhaltung. <https://www.desinfektion-dvg.de/index.php?id=1800> (accessed DD.MM.YYYY).

Alpaca Association New Zealand (2012): Paddock Card – Body Scoring. https://www.alpaca.org.nz/index.php/download_file/view/161/114/ (accessed DD.MM.YYYY)