Department of Biological and Nutritional Sciences

GUIDELINES FOR PRESENTATION OF WRITTEN WORK

A Presentation of Names of Biological Organisms

- The first time a species is mentioned in the text its full Latin name, genus plus species, must be given for unambiguous identification. For example

Homo sapiens *Escherichia coli*

Thereafter the generic name may be abbreviated to the first letter, followed by a full stop and a space e.g.

H. sapiens *E. coli*

Do not present the Latin name in any other form. Newspapers generally get it wrong. If two genera with the same initial letter are mentioned, write the names in full, or use abbreviations such as *Staph*. and *Strep*.

- The Latin generic name (or its abbreviation) and the specific name go in *italics*. In hand-written documents, where italics would be difficult to distinguish from ordinary handwriting, the name should be underlined instead.
- Other names, such as those of families and orders, should be in normal type. e.g. Nereideae (the family of the worm *Nereis virens*), Ericaceae (the family of the heather *Erica tetralix*). Names used informally (e.g. "most lactobacilli are…") and names used adjectivally (e.g. "staphylococcal") are also not italicised.
- In scientific publications, the authority for a Latin name (i.e. the name of the person who named the organism originally) must also be given. This should be in normal type. It is often abbreviated, as in *Homo sapiens* L where L = Linnaeus; and *E. coli* (Esch.) Cast. & Chalmers, where the bacterium was first named as *Bacillus coli* by Escherich, and later transferred to the genus *Escherichia* by Castellani and Chalmers.

B Rules for Citing Publications in Scientific Journals

- Only cite articles if you have read them, or at least a substantial, relevant part.
- You must cite all the articles from which you have obtained information or ideas that you use in your own document. You must not use other people's data or ideas and present them as your own: this is cheating. You must not quote from other articles (or newspapers or the world wide web) in your own document as though it was your own work: this form of cheating is known as plagiarism.

References within the text. These should be given in the following forms:
"…as shown by Glanville and Black (1986)." or "Sebrell and Harris (1967) showed that…."
"..the first product is a 3-carbon compound (Calvin, 1951)."
When there are several authors give the name of the first plus 'and others' (*et alia*), "..DNA sequence (Rowell *et al*. 1989)." Note the full stop after the abbreviation for *et alia*.

References within the reference list. Order the references alphabetically by first author, one author before two authors; earliest year of publication first.
For example: "Black" before "Smith"; "Black and Andrews" before "Black and Smith"
"Black and Smith" before "Black, Andrews and Smith"; "Smith (1983)" before "Smith (1991)".
In the reference list all authors are to be quoted (i.e. no *et al.*) unless there are more than ten.

Please use the following formats consistently for your submitted work (though you will recognise that other formats are used in various journals).

A research report in the journal "Nature", volume 171, pages 737-738:

Watson JD and Crick FHC (1953) Molecular structure of nucleic acids. A structure for deoxyribose nucleic acid. *Nature*, **171**, 737-738.

A book, published by Pelican, who have their offices at Harmondsworth:

Colinvaux P (1980) *Why Big Fierce Animals Are Rare.* Pelican, Harmondsworth.

Note that in a book title, but not in a scientific paper, the main words have an initial capital letter.

A chapter in a book, published by Raven Press who have offices in New York:

Elia M (1992) Organ and tissue contributions to metabolic rate. In *Energy Metabolism*, pp. 61-77 (J Kinney & H Tucker, eds.) Raven Press, New York.

A technical monograph

World Health Organization (1965) *Physiology of Lactation. Technical Report Series* no. 305 WHO, Geneva.

Websites: include the author, title, full WWW address (URL) and date of the version cited.

Department for Environment, Food and Rural Affairs (9 August 2001) Royal Society Inquiry Terms of Reference. <http://www.defra.gov.uk/corporate/inquiries/royalsoc/tor.htm>

C Figures and Tables.

Each figure with its caption (or 'legend') and table with its heading should be comprehensible without reference to the text. If the data in the figure or table have been derived from the literature, the source must be quoted.

Presenting Figures. Figures should be in black and white, and clearly distinguish different sets of values, using the following symbols in order of preference: ●, ❍, ▲, ■, ❑, ✕, ✚. Lines may also be distinguished by distinct markings (e.g. – – – and ———). Lines should not extend beyond experimental points. Similarly with histograms, shading must clearly distinguish different bars in 'grey scale'. A key should be included where appropriate to define symbols and line styles. Axes should have scale markings on the inner side, extending beyond the last experimental point.

Presenting Tables. Add appropriate borders. Often a line above and below the table and immediately beneath the column headings is sufficient. Abbreviations must be defined in footnotes, linked via signs * † ‡ § ¶ . If * or † indicate levels of statistical significance, they should not also be used for footnotes.

Labelling axes of figures and columns in tables

- Each column heading or axis label must state the measurement or quantity being measured (e.g. length) and the unit of measurement (e.g. mm) in one of the following forms: 'length (mm)' or 'length/mm'.
- The first convention - length (mm) - is frequently used. The second - length/mm' - is recommended by the Royal Society, and is better for dealing with powers of 10.

If a column is headed "Length (mm x 10^2)" - does this mean that "23" in the column represents 23 x 1/100 mm, or 23 x 100 mm? (It should mean that 23 is 100x the true length, i.e. the true length is 0.23 mm, but *is this obvious*?)
If a column is headed "Length/10^2 mm" – then '23' in the column beneath corresponds to the statement "Length = 23 x 10^2 mm". This is unambiguous.
Take care that powers of ten are made clear.

D The International System of Units (S I units)

Units for various quantities are listed in most major journals. Some of the most relevant basic units and their symbols are listed below. One may also use other convenient units, such as the gram (g), day (d), minute (min) etc., if they are compatible with SI units.

Quantity	Name of Unit	Symbol	
length	metre	m	
mass	kilogram	kg	
time	second	s	
amount	mole	mol	amounts of both chemical and other entities such as photons
volume	litre	l	Note: lower case l
concentration	molar	M	mol l^{-1} (= mol dm^{-3}). mol m^{-3} is the most logical unit of concentration

For substances of known molecular weight concentrations should be expressed as mol l^{-1} (M). For substances of indeterminate molecular weights, e.g. phospholipids and proteins, g l^{-1} should be used.
Always put a space between the number and unit, as in 10 kg, not 10kg.

Useful prefixes T tera- = 10^{12} G giga- = 10^9 M mega- = 10^6 k kilo- = 10^3
m milli- = 10^{-3} μ micro- = 10^{-6} n nano- = 10^{-9} p pico- = 10^{-12}

E Abbreviations Avoid abbreviations and jargon unless you are certain that they will make the text easier to read, make significant economy of space, or speed up a discussion. DNA is universally understood; MRP is not. If in doubt, use the full name.
If you consider it essential to abbreviate a name (what is gained by abbreviation?), give the abbreviation in brackets after the first mention of the name in the text, e.g. "3-methyl valeric acid (3MV)". After that the abbreviation alone may be used. A list of abbreviations at the start of a thesis may be helpful, but if the reader has to continuously refer back to this code, then the abbreviation is not helpful.

F Style The aim of writing or speaking is to convey a message to the reader or hearer. Anything which gets in the way of this is to be avoided. Therefore write clearly, to get your meaning across.

WJC, HJF, Oct 2001