

final version, including your comment, to make sure that it still sounds right in context.

Studio punch-ups

He may be wanting you to come and talk in a sound or TV studio. Karl Sabbagh has already explained how TV features are made. In general, my advice on the studio punch-ups with a doctor, a lawyer, a sociologist, a trade-union official, two coal-miners, and a dog is—leave them to the experts. Talking one-to-one with a reporter is fair enough: multipanel discussions usually leave the participants angry and frustrated.

On the whole, however, talking to reporters can be fun—

intellectually stimulating and worth while. But please don't talk about something outside your range of current knowledge—what you learnt about virology in medical school is not good enough 12 years later. Don't criticise another doctor's treatment—he's seen the patient and you haven't. Don't say that anyone concerned is a fool unless you've met him or her and you're certain. Don't seem to assume that patients are invariably ignorant, lazy, and wrong and that doctors are always conscientious, polite, considerate, and right. And don't answer any questions you don't want to answer.

Then, with any luck, you'll get to know your reporter and he'll come to you again and learn to rely on you—and you on him. Once that occurs you'll be able to forget all the horror stories.

Style Matters

Uniform requirements for manuscripts submitted to biomedical journals

International Steering Committee of Medical Editors*

British Medical Journal, 1979, 1, 532-535

On 5 February 1979 the second meeting of the International Steering Committee of Medical Editors was held in Montreal. The committee approved the proposals for a uniform style for submitted manuscripts contained in the original Vancouver document¹ with some minor amendments. The revised version is published here, and many journals will begin to introduce the system later this year.

The editors of several journals (including the founder journals listed in Appendix 1) have agreed to receive manuscripts prepared and submitted in accordance with the requirements described here. Authors must also consult the instructions printed in the journal to which they plan to submit their manuscripts for information as to what clinical or scientific material is suitable for that particular journal and the types of papers that may be submitted—for example, original articles, review articles, case reports, and brief reports. In addition, the journal's own instructions contain important information concerning acceptable languages, length of articles, approved abbreviations besides those listed in this document, number of copies of manuscripts to be submitted, and requirements for transfer of copyright.

The material in this document will be revised at intervals. Inquiries and comments originating in North America should be sent to Edward J Huth, MD, *Annals of Internal Medicine*, 4200 Pine Street, Philadelphia, PA 19104; those originating in other regions should be sent to Stephen Lock, MA, MB, *British Medical Journal*, British Medical Association, Tavistock Square, London WC1H 9JR, United Kingdom.

Reprints of these instructions will be available to editors of biomedical journals free of charge and to authors at a cost of 50p (including postage) from the Editor, *BMJ*. A full list of all participating journals will be published later this year.

Summary of requirements

Type manuscript double-spaced, including title page, abstract, text, acknowledgments, references, tables, and legends.

Each manuscript component should begin on a new page, in this sequence: title page; abstract and key words; text; acknowledgments; references; tables: each table, complete with title and footnotes, on a separate page; legends for illustrations.

Illustrations must be good quality, unmounted glossy prints usually 12.7 × 17.3 cm (5 × 7 in) but no larger than 20.3 × 25.4 cm (8 × 10 in).

Submit the required number of copies of manuscript and figures (see journal's instructions) in heavy-paper envelope. Submitted manuscript should be accompanied by covering letter, as described under "Submission of manuscripts," and permissions to reproduce previously published materials or to use illustrations that may identify subjects.

Follow journal's instructions for transfer of copyright.

Authors should keep copies of everything submitted.

Preparation of manuscript

Type manuscript on white bond paper, 20.3 × 26.7 cm or 21.6 × 27.9 cm (8 × 10½ in or 8½ × 11 in) or ISO A4 (212 × 297 mm) with margins of at least 2.5 cm (1 in). Use double spacing throughout, including title page, abstract, text, acknowledgments, references, tables, and legends for illustrations. Begin each of the following sections on separate pages: title page, abstract and key words, text, acknowledgments, references, individual tables, and legends. Number pages consecutively, beginning with the title page. Type the page number in the upper right-hand corner of each page.

Manuscripts will be reviewed for possible publication with the

*Members of the International Steering Committee are: John F Murray, MD (chairman); William R Barclay, MD; Susan Crawford, PhD; Edward J Huth, MD; Stephen Lock, MB; Robert W Mayo; Harriet R Meiss; Ian Munro, MB; Frances H Porcher, MA; Arnold S Relman, MD; David A E Shephard, MD; Therese Southgate, MD.

understanding that they are being submitted to one journal at a time and have not been published, simultaneously submitted, or already accepted for publication elsewhere. This does not preclude consideration of a manuscript that has been rejected by another journal or of a complete report that follows publication of preliminary findings elsewhere, usually in the form of an abstract. Copies of any possibly duplicative published material should be submitted with the manuscript that is being sent for consideration.

TITLE PAGE

The title page should contain (1) the title of the article, which should be concise but informative; (2) a short running head or footnote of no more than 40 characters (count letters and spaces) placed at the foot of the title page and identified; (3) first name, middle initial, and last name of each author, with highest academic degree(s); (4) name of department(s) and institution(s) to which the work should be attributed; (5) disclaimers, if any; (6) name and address of author responsible for correspondence about the manuscript; (7) name and address of author to whom requests for reprints should be addressed, or statement that reprints will not be available from the author; (8) the source(s) of support in the form of grants, equipment, drugs, or all of these.

ABSTRACT AND KEY WORDS

The second page should carry an abstract of not more than 150 words. The abstract should state the purposes of the study or investigation, basic procedures (study subjects or experimental animals and observational and analytic methods), main findings (give specific data and their statistical significance, if possible), and the principal conclusions. Emphasise new and important aspects of the study or observations. Use only approved abbreviations (see Appendix 2 for commonly used approved abbreviations).

Key (indexing) terms—Below the abstract, provide and identify as such, three to 10 key words or short phrases that will assist indexers in cross-indexing your article and that may be published with the abstract. Use terms from the Medical Subject Headings list from *Index Medicus* whenever possible.

TEXT

The text of observational and experimental articles is usually—but not necessarily—divided into sections with the headings Introduction, Methods, Results, and Discussion. Long articles may need subheadings within some sections to clarify their content, especially the Results and Discussion sections. Other types of articles such as case reports, reviews, and editorials are likely to need other formats, and authors should consult individual journals for further guidance.

Introduction—Clearly state the purpose of the article. Summarise the rationale for the study or observation. Give only strictly pertinent references, and do not review the subject extensively.

Methods—Describe your selection of the observational or experimental subjects (patients or experimental animals, including controls) clearly. Identify the methods, apparatus (manufacturer's name and address in parenthesis), and procedures in sufficient detail to allow other workers to reproduce the results. Give references to established methods, including statistical methods; provide references and brief descriptions of methods that have been published but are not well known; describe new or substantially modified methods, give reasons for using them, and evaluate their limitations.

When reporting experiments on human subjects, indicate whether the procedures followed were in accord with the ethical standards of the committee on human experimentation of the institution in which the experiments were done or in accord with the Helsinki Declaration of 1975. When reporting experiments on animal subjects, indicate whether the institution's or the national research council's guide for the care and use of laboratory animals was followed. Identify precisely all drugs and chemicals used, including generic name(s), dosage(s), and route(s) of administration. Do not use patients' names, initials, or hospital numbers.

Include numbers of observations and the statistical significance of the findings when appropriate. Detailed statistical analyses, mathematical derivations, and the like may sometimes be suitably presented in the form of one or more appendixes.

Results—Present your results in logical sequence in the text, tables, and illustrations. Do not repeat in the text all the data in the tables

or illustrations, or both: emphasise or summarise only important observations.

Discussion—Emphasise the new and important aspects of the study and conclusions that follow from them. Do not repeat in detail data given in the Results section. Include in the Discussion the implications of the findings and their limitations and relate the observations to other relevant studies. Link the conclusions with the goals of the study but avoid unqualified statements and conclusions not completely supported by your data. Avoid claiming priority and alluding to work that has not been completed. State new hypotheses when warranted, but clearly label them as such. Recommendations, when appropriate, may be included.

ACKNOWLEDGMENTS

Acknowledge only persons who have made substantive contributions to the study. Authors are responsible for obtaining written permission from everyone acknowledged by name because readers may infer their endorsement of the data and conclusions.

REFERENCES

Number references consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses). References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.

Use the form of references adopted by the US National Library of Medicine and used in *Index Medicus*. Use the style of the examples cited at the end of this section, which have been approved by the National Library of Medicine.

The titles of journals should be abbreviated according to the style used in *Index Medicus*. A list of abbreviated names of frequently cited journals is given in Appendix 2; for others, consult the "List of Journals Indexed," printed annually in the January issue of *Index Medicus*.

Try to avoid using abstracts as references; "unpublished observations" and "personal communications" may not be used as references, although references to written, not verbal, communications may be inserted (in parentheses) in the text. Include among the references manuscripts accepted but not yet published; designate the journal followed by "in press" (in parentheses). Information from manuscripts submitted but not yet accepted should be cited in the text as "unpublished observations" (in parentheses).

The references must be verified by the author(s) against the original documents.

Examples of correct forms of references are given below.

Journal

(1) **Standard journal article**—(List all authors when six or less; when seven or more, list only first three and add *et al.*)

Soter NA, Wasserman SI, Austen KF. Cold urticaria: release into the circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

(2) **Corporate author**

The Committee on Enzymes of the Scandinavian Society for Clinical Chemistry and Clinical Physiology. Recommended method for the determination of gamma-glutamyltransferase in blood. *Scand J Clin Lab Invest* 1976;36:119-25.

Anonymous. Epidemiology for primary health care. *Int J Epidemiol* 1976;5:224-5.

Books and other monographs

(3) **Personal author(s)**

Osler AG. Complement: mechanisms and functions. Englewood Cliffs: Prentice-Hall, 1976.

(4) **Corporate author**

American Medical Association Department of Drugs. AMA drug evaluations. 3rd ed. Littleton: Publishing Sciences Group, 1977.

(5) **Editor, compiler, chairman as author**

Rhodes AJ, Van Rooyen CE, comps. Textbook of virology: for students and practitioners of medicine and the other health sciences. 5th ed. Baltimore: Williams & Wilkins, 1968.

(6) Chapter in book

Weinstein L, Swartz MN. Pathogenic properties of invading micro-organisms. In: Sodeman WA Jr, Sodeman WA, eds. *Pathologic physiology: mechanisms of disease*. Philadelphia: WB Saunders, 1974:457-72.

(7) Agency publication

National Center for Health Statistics. Acute conditions: incidence and associated disability, United States July 1968-June 1969. Rockville, Md.: National Center for Health Statistics, 1972. (Vital and health statistics. Series 10: Data from the National Health Survey, No 69) (DHEW publication No (HSM)72-1036).

Other articles

(8) Newspaper article

Shaffer RA. Advances in chemistry are starting to unlock mysteries of the brain: discoveries could help cure alcoholism and insomnia, explain mental illness. How the messengers work. *Wall Street Journal* 1977 Aug 12:1(col 1), 10(col 1).

(9) Magazine article

Roueché B. Annals of medicine: the Santa Claus culture. *The New Yorker* 1971 Sep 4:66-81.

TABLES

Type each table on a separate sheet; remember to double space. Do not submit tables as photographs. Number tables consecutively and supply a brief title for each. Give each column a short or abbreviated heading. Place explanatory matter in footnotes, not in the heading. Explain in footnotes all non-standard abbreviations that are used in each table. For footnotes, use the following symbols in this sequence: †, ‡, §, ||, ¶, **, ††.... Identify statistical measures of variations such as SD and SEM.

Omit internal horizontal and vertical rules.

Cite each table in the text in consecutive order.

If you use data from another published or unpublished source, obtain permission and acknowledge fully.

Having too many tables in relation to the length of the text may produce difficulties in the layout of pages. Examine issues of the journal to which you plan to submit your manuscript to estimate how many tables to use per 1000 words of text.

The editor on accepting a manuscript may recommend that additional tables containing important backup data too extensive to be published may be deposited with the National Auxiliary Publications Service or made available by the author(s). In that event, an appropriate statement will be added to the text. Submit such tables for consideration with the manuscript.

ILLUSTRATIONS

Submit the required number of complete sets of figures. Figures should be professionally drawn and photographed; freehand or typewritten lettering is unacceptable. Instead of original drawings, roentgenograms, and other material, send sharp, glossy black-and-white photographic prints, usually 12.7 x 17.3 cm (5 x 7 in) but no larger than 20.3 x 25.4 cm (8 x 10 in). Letters, numbers, and symbols should be clear and even throughout, and of sufficient size that when reduced for publication each item will still be legible. Titles and detailed explanations belong in the legends for illustrations, not on the illustrations themselves.

Each figure should have a label pasted on its back indicating the number of the figure, the names of the authors, and the top of the figure. Do not write on the back of the figures or mount them on cardboard, or scratch or mar them using paper clips. Do not bend figures.

Photomicrographs must have internal scale markers. Symbols, arrows, or letters used in the photomicrographs should contrast with the background.

If photographs of persons are used, either the subjects must not be identifiable or their pictures must be accompanied by written permission to use the photograph.

Cite each figure in the text in consecutive order. If a figure has been published, acknowledge the original source and submit written permission from the copyright holder to reproduce the material. Permission is required, regardless of authorship or publisher, except for documents in the public domain.

For illustrations in colour, supply colour negatives or positive transparencies and, when necessary, accompanying drawings marked to indicate the region to be reproduced; in addition, send two positive colour prints to assist editors in making recommendations. Some journals publish illustrations in colour only if the author pays for the extra cost.

LEGENDS FOR ILLUSTRATIONS

Type legends for illustrations double spaced, starting on a separate page with arabic numerals corresponding to the illustrations. When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, identify and explain each one clearly in the legend. Explain internal scale and identify method of staining in photomicrographs.

Abbreviations

Use only standard abbreviations (see Appendix 2 for lists of common approved abbreviations). Consult the following sources for additional standard abbreviations: (1) CBE Style Manual Committee. *Council of Biology Editors Style Manual: a Guide for Authors, Editors, and Publishers in the Biological Sciences*. 4th ed. Arlington: Council of Biology Editors, 1978; and (2) O'Connor M, Woodford FP. *Writing Scientific Papers in English: an ELSE-Ciba Foundation Guide for Authors*. Amsterdam, Oxford, New York: Elsevier-Excerpta Medica, 1975. Avoid abbreviations in the title. The full term for which an abbreviation stands should precede its first use in the text unless it is a standard unit of measurement.

In most countries the International System of Units (SI) is standard or is becoming so. Report measurements in the units in which they were made. Journals may use these units, convert them to another system, or use both.

Submission of manuscripts

Mail the required number of manuscript copies in a heavy paper envelope, enclosing the manuscript copies and figures in cardboard, if necessary, to prevent bending of photographs during mail handling. Place photographs and transparencies in a separate heavy paper envelope.

Manuscripts should be accompanied by a covering letter from the author who will be responsible for correspondence regarding the manuscript. The covering letter should contain a statement that the manuscript has been seen and approved by all authors. The letter should give any additional information that may be helpful to the editor, such as the type of article the manuscript represents in the particular journal, information on publication of any part of the manuscript, and whether the author(s) will be willing to meet the cost of reproducing colour illustrations. Include copies of any permissions needed to reproduce published material or to use illustrations of identifiable subjects.

Reference

¹ International Steering Committee of Medical Editors, *British Medical Journal*, 1978, 1, 1334.

Appendix 1

PARTICIPATING JOURNALS (TENTATIVE LIST)

American Journal of Diseases of Children	Archives of Surgery
American Review of Respiratory Disease	British Medical Journal
Annals of Internal Medicine	Canadian Journal of Public Health (Revue Canadienne de Santé Publique)
Archives of Dermatology	Canadian Medical Association Journal
Archives of General Psychiatry	Clinical and Investigative Medicine
Archives of Internal Medicine	Circulation
Archives of Neurology	Journal of the American Medical Association
Archives of Ophthalmology	Lancet
Archives of Otolaryngology	New England Journal of Medicine
Archives of Pathology and Laboratory Medicine	

Appendix 2

COMMONLY USED APPROVED ABBREVIATIONS

TABLE I—*Standard units of measurements and statistical terms*

Term	Abbreviation or symbol	Term	Abbreviation or symbol
<i>Standard units of measurement</i>			
ampere	A	joule	J
Ångstrom	Å	kelvin	K
barn	b	kilogram	kg
candela	cd	liter, litre	l or L
coulomb	C	meter, metre	m
counts per minute	cpm	minute	min
counts per second	cps	molar	M
curie	Ci	mole	mol
degree Celsius	C	newton	N
disintegration per minute	dpm	normal (concentration)	N
disintegration per second	dps	ohm	Ω
electron Volt	eV	osmol	osmol
equivalent	Eq	pascal	Pa
farad	F	revolutions per minute	rpm
gauss	G	second	s
gram	g	square centimeter	cm ²
henry	H	volt	V
hertz	Hz	watts	W
hour	h	week	wk
international unit	IU	year	yr
<i>Statistical terms</i>			
correlation coefficient	r	probability	P
degrees of freedom	df	standard deviation	SD
mean	̄x	standard error of the mean	SEM
not significant	NS	"Student's" t test	t test
number of observations	n	variance ratio	F

ABBREVIATIONS OF NAMES OF FREQUENTLY CITED JOURNALS

Acta Medica Scandinavica	Acta Med Scand
American Family Physician	Am Fam Physician
American Heart Journal	Am Heart J
American Journal of Cardiology	Am J Cardiol
American Journal of Clinical Nutrition	Am J Clin Nutr
American Journal of Clinical Pathology	Am J Clin Pathol
American Journal of Digestive Diseases	Am J Dig Dis
American Journal of Diseases of Children	Am J Dis Child
American Journal of Human Genetics	Am J Hum Genet
American Journal of the Medical Sciences	Am J Med Sci
American Journal of Medicine	Am J Med
American Journal of Obstetrics and Gynecology	Am J Obstet Gynecol
American Journal of Ophthalmology	Am J Ophthalmol
American Journal of Pathology	Am J Pathol
American Journal of Physical Medicine	Am J Phys Med
American Journal of Physiology	Am J Physiol
American Journal of Psychiatry	Am J Psychiatry
American Journal of Public Health	Am J Public Health
AJR; American Journal of Roentgenology	AJR
American Journal of Surgery	Am J Surg
American Journal of Tropical Medicine and Hygiene	Am J Trop Med Hyg
American Review of Respiratory Disease	Am Rev Respir Dis
Anaesthesia	Anaesthesia
Anesthesiology	Anesthesiology
Annals of Allergy	Ann Allergy
Annals of Internal Medicine	Ann Intern Med
Annals of Otology, Rhinology and Laryngology	Ann Otol Rhinol Laryngol
Annals of Surgery	Ann Surg
Annals of Thoracic Surgery	Ann Thorac Surg
Archives of Dermatology	Arch Dermatol
Archives of Environmental Health	Arch Environ Health
Archives of General Psychiatry	Arch Gen Psychiatry
Archives of Internal Medicine	Arch Intern Med
Archives of Neurology	Arch Neurol
Archives of Ophthalmology	Arch Ophthalmol
Archives of Otolaryngology	Arch Otolaryngol
Archives of Pathology and Laboratory Medicine	Arch Pathol Lab Med
Archives of Physical Medicine and Rehabilitation	Arch Phys Med Rehabil
Archives of Surgery	Arch Surg
Arthritis and Rheumatism	Arthritis Rheum
Blood; Journal of Hematology	Blood
Brain; Journal of Neurology	Brain
British Heart Journal	Br Heart J
British Journal of Obstetrics and Gynaecology	Br J Obstet Gynaecol
British Journal of Radiology	Br J Radiol
British Journal of Surgery	Br J Surg
British Medical Journal	Br Med J
Canadian Journal of Public Health	Can J Public Health
Canadian Medical Association Journal	Can Med Assoc J
Cancer	Cancer
Chest	Chest
Circulation; Journal of the American Heart Association	Circulation
Circulation Research	Circ Res
Clinical Pediatrics	Clin Pediatr (Phila)
Clinical Pharmacology and Therapeutics	Clin Pharmacol Ther
Clinical Science and Molecular Medicine	Clin Sci Mol Med
Clinical Toxicology	Clin Toxicol
Diabetes	Diabetes
DM; Disease-a-Month	DM
Endocrinology	Endocrinology
Gastroenterology	Gastroenterology
Geriatrics	Geriatrics
Gut	Gut
Human Pathology	Hum Pathol
Investigative Radiology	Invest Radiol
JAMA; Journal of the American Medical Association	JAMA
Journal of Allergy and Clinical Immunology	J Allergy Clin Immunol
Journal of Applied Physiology	J Appl Physiol
Journal of Biological Chemistry	J Biol Chem
Journal of Bone and Joint Surgery; American Volume	J Bone Joint Surg [Am]
Journal of Bone and Joint Surgery; British Volume	J Bone Joint Surg [Br]
Journal of Clinical Endocrinology and Metabolism	J Clin Endocrinol Metab
Journal of Clinical Investigation	J Clin Invest
Journal of Clinical Pathology	J Clin Pathol
Journal of Experimental Medicine	J Exp Med
Journal of Gerontology	J Gerontol
Journal of Immunology	J Immunol
Journal of Infectious Diseases	J Infect Dis
Journal of Investigative Dermatology	J Invest Dermatol
Journal of Laboratory and Clinical Medicine	J Lab Clin Med
Journal of Laryngology and Otology	J Laryngol Otol
Journal of Medical Education	J Med Educ
Journal of Nervous and Mental Disease	J Nerv Ment Dis
Journal of Neurosurgery	J Neurosurg
Journal of Pathology	J Pathol
Journal of Pediatrics	J Pediatr
Journal of Physiology	J Physiol
Journal of Thoracic and Cardiovascular Surgery	J Thorac Cardiovasc Surg
Journal of Trauma	J Trauma
Journal of Urology	J Urol
Lancet	Lancet
Medical Clinics of North America	Med Clin North Am
Medical Letter on Drugs and Therapeutics	Med Lett Drugs Ther
Medicine (Baltimore)	Medicine (Baltimore)
New England Journal of Medicine	N Engl J Med
Obstetrics and Gynecology	Obstet Gynecol
Pediatric Clinics of North America	Pediatr Clin North Am
Pediatrics	Pediatrics
Physiological Reviews	Physiol Rev
Plastic and Reconstructive Surgery	Plast Reconstr Surg
Postgraduate Medicine	Postgrad Med
Progress in Cardiovascular Diseases	Prog Cardiovasc Dis
Public Health Reports	Public Health Rep
Radiology	Radiology
Rheumatology and Rehabilitation	Rheumatol Rehabil
Seminars in Roentgenology	Semin Roentgenol
Surgery	Surgery
Surgery, Gynecology and Obstetrics	Surg Gynecol Obstet

TABLE II—*Combining factors*

Name and factor	Symbol	Name and factor	Symbol	Name and factor	Symbol
tera- (10 ¹²)	T	deca- (10 ¹)	da	nano- (10 ⁻⁹)	n
giga- (10 ⁹)	G	dec- (10 ⁻¹)	d	pico- (10 ⁻¹²)	p
mega- (10 ⁶)	M	centi- (10 ⁻²)	c	femto- (10 ⁻¹⁵)	f
kilo- (10 ³)	k	milli- (10 ⁻³)	m	atto- (10 ⁻¹⁸)	a
hecto- (10 ²)	h	micro- (10 ⁻⁶)	μ		

TABLE III—*Other common abbreviations*

Term	Abbreviation or symbol
adenosinediphosphatase	ADPase
adenosine 5'-diphosphate (adenosine diphosphate)	ADP
adenosine 5'-monophosphate (adenosine monophosphate)	AMP
adenylic acid	AMP
adenosine triphosphatase	ATPase
adenosine 5'-triphosphate (adenosine triphosphate)	ATP
adrenocorticotrophic hormone (adrenocorticotropin)	ACTH
bacillus Calmette-Guérin	BCG
basal metabolic rate	BMR
body temperature, pressure, and saturated	BTPS
central nervous system	CNS
coenzyme A	coA
deoxyribonucleic acid (deoxyribonuclease)	DNA
dihydroxyphenylalanine	dopa
electrocardiogram	ECG
electroencephalogram	EEG
enteric cytopathogenic human orphan (virus)	ECHO
ethyl	Et
ethylenediaminetetraacetate	EDTA
gas-liquid chromatography	GLC
guanosine 5'-monophosphate (guanosine monophosphate, guanylic acid)	GMP
haemoglobin	Hb
logarithm (to base 10; common logarithm)	log
logarithm, natural	In
methyl	Me
Michaels constant	K _m
negative logarithm of hydrogen ion activity	pH
partial pressure of CO ₂	PCO ₂
partial pressure of O ₂	PO ₂
per	/
per cent	%
radiation (ionising, absorbed dose)	rad
respiratory quotient	RQ
specific gravity	sp gr
standard atmosphere	atm
standard temperature and pressure	STP
ultraviolet	uv
volume	vol
volume ratio (volume per volume)	vol/vol
weight	wt
weight per volume	wt/vol
weight ratio (weight per weight)	wt/wt