Appendix 1: Standard Abbreviations

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The following abbreviations may be used without definition in the journal *Applied Animal Science*. Abbreviations of all chemical elements, common combinations of chemical elements, SI units of measure used with a value, and common amino acids (3-letter and 1-letter abbreviations) should be used without definition. Abbreviations are not permitted in the title, running head, and key words. Plural abbreviations do not require "s".

AA	amino acid(s)
ACTH	adrenocorticotropin
ADF	acid detergent fiber
ADFI	average daily feed intake
ADG	average daily gain
ADIN	acid detergent insoluble nitrogen
ADL	acid detergent lignin
ADP	adenosine diphosphate
AI	artificial insemination
AMP, ADP, ATP	adenosine mono-, di-, or triphosphate
ANOVA	analysis of variance
ARS	Agricultural Research Service
avg	average (use only in tables, not in the text)
B cell	bursal-derived, bursal-equivalent derived cell
BCS	body condition score
BHB	β-hydroxybutyrate
BLUP	best linear unbiased prediction
BSA	bovine serum albumin
BUN	blood urea nitrogen
BW	body weight
cDNA	complementary DNA
CI	confidence interval
CoA	coenzyme A
CP	crude protein
CV	coefficient of variation
DCAD	dietary cation-anion difference
DE	digestible energy
DEAE	(dimethylamino)ethyl
df	degree(s) of freedom
DHI(A)	Dairy Herd Improvement Association
DIM	days in milk
DM	dry matter
DMI	dry matter intake
DNA	deoxyribonucleic acid
DP	dressing percentage
EAA	essential amino acid
EBV	estimated breeding value
ECM	energy-corrected milk
EDTA	ethylenediaminetetraacetate
EFA	essential fatty acid
ETA	estimated transmitting ability
ELISA	enzyme-linked immunosorbent antibody assay
EPD	expected progeny difference
Exp.	experiment
FCM	fat-corrected milk
FFA	free fatty acid
F:G	feed-to-gain ratio
FSH	follicle-stimulating hormone
GE	gross energy
G:F	gain-to-feed ratio
GLC	gas-liquid chromatography
GLM	general linear model
HPLC	high-performance (high-pressure) liquid chromatography
h^2	heritability
Ig	immunoglobulin
IGF	insulin-like growth hormone
i.m.	intramuscular
i.p.	intraperitoneal
i.v.	intravenous
IVDMD	in vitro dry matter disappearance
KPH	kidney, pelvic, heart fat
LD_{50}	50% lethal dose
LM	longissimus muscle
LSD	least significant difference
LSM	least-squares mean
ME	metabolizable energy
MHC	major histocompatibility complex
MP	metabolizable protein
mRNA	messenger ribonucleic acid
MSE	mean square error
MUFA	monounsaturated fatty acid
MUN	milk urea nitrogen
N	normal
n	number of observations
NDF	neutral detergent fiber
NE	net energy
NEg	net energy for gain
NEl	net energy for lactation
NEm	net energy for maintenance
NEAA	nonessential amino acid
NPN	nonprotein nitrogen
NS	not significant
OM	organic matter
P	statistical probability
PAGE	polyacrylamide gel electrophoresis
PBS	phosphate-buffered saline
PCR	polymerase chain reaction
ppm	parts per million
PTA	predicted transmitting ability
PUFA	polyunsaturated fatty acid
QG	quality grade
r	correlation coefficient
R^2	coefficient of multiple determination
RDP	rumen-degradable protein
RIA	radioimmunoassay
RNA	ribonucleic acid
RUP	rumen-undegradable protein
s.c.	subcutaneous
SCC	somatic cell count
SD	standard deviation
SDS	sodium dodecyl sulfate
SE	standard error
SEM	standard error of the mean
SFA	saturated fatty acids
T cell	thymic-derived cell
TDF	total dietary fiber
TDN	total digestible nutrients
TLC	thin layer chromatography
TME	true metabolizable energy
TME_n	nitrogen-corrected true metabolizable energy
TMR	total mixed ration
Tris	tris(hydroxymethyl)aminomethane
TSAA	total sulfur amino acids
UFA	unsaturated fatty acids
USDA	United States Department of Agriculture
UV	ultraviolet
VFA	volatile fatty acid
YG	yield grade

Appendix 2: Selected Units and Terms

The following units and terms can be used without definition in *Applied Animal Science*.

atomic mass unit	amu
atmosphere	atm
base pair	bp
calorie (gram)	cal
celsius (with number)	°C
centimeter	cm
centimeter, square	cm^2
circa	ca.
centimorgan	cM
centipoise	cP
central processing unit	CPU
colony-forming unit	cfu
counts per minute	cpm
counts per second	cps
crossed with, times	×
cubic	cu
cubic centimeter	cc, cm^3
cubic millimeter	mm^3
curie	Ci
cycles per second (hertz)	Hz
day(s)	d
dalton	Da
deci	d (prefix)
deciliter	dL
electron volt	eV
equivalents	Eq
foot-candle	use lx
gram	g
gravity	*g*
hectare	ha
hour(s)	h
inside diameter	i.d.
international unit	IU
intramuscularly	i.m.
intraperitoneally	i.p.
intravenously	i.v.
joule	J
kilo	k (prefix)
kilobase	kb
kilobyte	KB
kilocalorie	kcal
kilogram	kg
kilopascal	kPa
liter	L
logarithm (natural)	ln
logarithm (base 10)	$\log_{10}$
lux	lx
mega	M (prefix)
meter	m
metric tonne	t or tonne
micro	µ (prefix)
microcurie	µCi
microfarad	µF
microgram	µg
microliter	µL
milli	m (prefix)
milliliter	mL
millimeters of mercury	mm Hg
millimolar (concentration)	m*M* (= mmol/L)
millimole (mass)	mmol
minute(s)	min
molar (concentration)	*M*
molar (mass)	mol
mole (number, mass)	mol
month(s)	mo
morning/afternoon	a.m./p.m.
nano	n (prefix)
newton	N
normal (concentration)	*N*
nanogram	ng
osmolality	use mmol/kg
outside diameter	o.d.
parts per billion	ppb (use µg/kg or equivalent)
parts per million	ppm (use mg/kg or equivalent)
pascal	Pa
pico	p (prefix)
picogram	pg
plaque-forming unit	pfu
probability	*P*
revolutions per minute	rpm
second(s)	s
siemens	S
species	spp.
subcutaneous	s.c.
subspecies	ssp.
unit	U
volt	V
volume	vol
volume/volume	vol/vol (use parenthetically)
watt	W
week(s)	wk
weight/volume	wt/vol (use parenthetically)
year(s)	yr

Amino Acids

alanine	Ala
arginine	Arg
asparagine	Asn
aspartic acid	Asp
citrulline	Cit
cysteine	Cys
glutamic acid	Glu
glutamine	Gln
glycine	Gly
histidine	His
isoleucine	Ile
leucine	Leu
lysine	Lys
methionine	Met
ornithine	Orn
phenylalanine	Phe
proline	Pro
serine	Ser
threonine	Thr
tryptophan	Trp
tyrosine	Tyr
valine	Val