A STUDY OF METABOLIC DIFFERENCES BETWEEN FAT

AND MEATY SOUTHDOWN SHEEP

A thesis presented in partial fulfillment

of the requirements for the degree of

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MARK LEVETT CARTER

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LIST OF ABBREVIATIONS

ADG  average daily gain 
ANOVA  analysis of variance 
BMR  basal metabolic rate 
BSA  bovine serum albumin 
BW  body weight 
cAMP  cyclic adenosine monophosphate 
CV  coefficient of variation 
dl  decilitre 
DM  drymatter 
DNA  deoxyribonucleic acid 
e  natural base of logarithms 
g  gram 
G(t)  glucose concentration at time t 
h  hour 
h2  heritability 
IGF-1  insulin-like growth factor-1 
IU  international unit 
Kg  glucose fractional decay constant 
kg  kilogram 
LPL  lipoprotein lipase 
mg  milligram 
mm  millimeter 
mM  millimolar 
ml  millilitre 
MANOVA  multivariate analysis of variance 
MEI  metabolizable energy intake 
MJ ME  megajoules metabolizable energy 
MSA  multiplicative stimulating activity 
NADPH  nicotinamide adenine dinucleotide 
ng  nanogram 
NSILA  non suppressible insulin-like factors 
NEFA  non-esterified fatty acids 
P  probability 
r  correlation coefficient 
RNA  ribonucleic acid 
SED  standard error of the difference 
SEM  standard error of the mean 
T3  triiodothyronine 
T4  thyroxine 
pg  picogram 
µg  microgram 
µl  microlitre 

Levels of Statistical Significance

NS  Not significant P>0.1 
†  0.05< P <0.1 
*  0.01< P <0.05 
**  0.001< P <0.01 
*** P<0.001