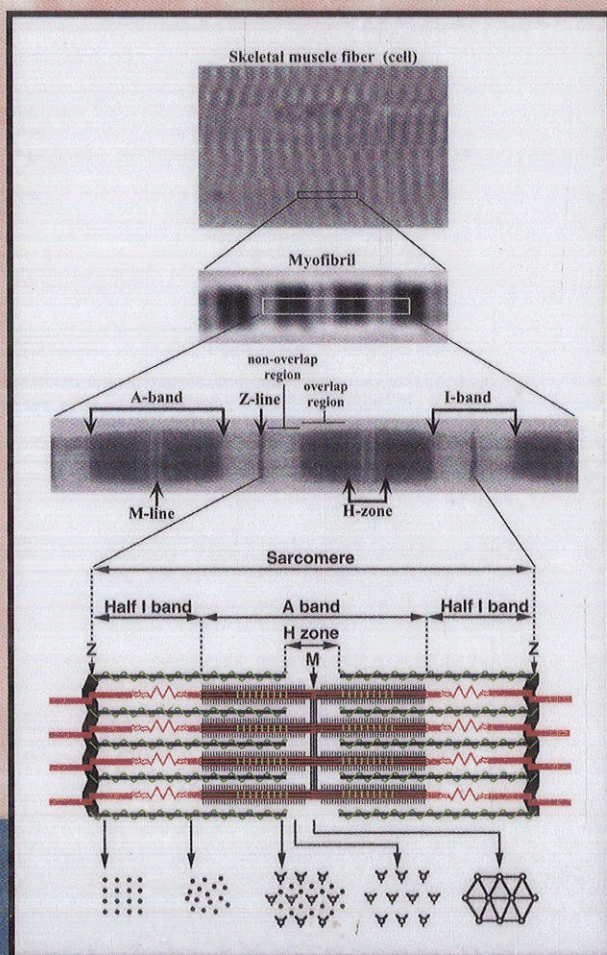


Edited by
Min Du
Richard J. McCormick

Applied Muscle Biology and Meat Science



CRC Press
Taylor & Francis Group

Contents

Preface.....	vii
About The Editors.....	ix
Contributors	xi
Chapter 1 Muscle Structure and Function	1
<i>Darl R. Swartz, Marion L. Greaser, and Marie E. Cantino</i>	
Chapter 2 Satellite Cell Biology.....	47
<i>R.P. Rhoads, C.R. Rathbone, and K.L. Flann</i>	
Chapter 3 Adipose Tissue Development in Extramuscular and Intramuscular Depots in Meat Animals.....	67
<i>G.J. Hausman and S.P. Poulos</i>	
Chapter 4 Fetal Programming of Skeletal Muscle Development	81
<i>Min Du and Meijun Zhu</i>	
Chapter 5 Muscle Fiber Characteristics and Their Relation to Meat Quality	97
<i>Jennifer L. Aalhus, W.M. Robertson, and Jin Ye</i>	
Chapter 6 Muscle Protein Turnover	115
<i>Margrethe Therkildsen and Niels Oksbjerg</i>	
Chapter 7 Collagen.....	129
<i>Richard J. McCormick</i>	
Chapter 8 Protein Degradation Postmortem and Tenderization	149
<i>D.L. Hopkins and G.H. Geesink</i>	
Chapter 9 Regulation of Postmortem Glycolysis and Meat Quality	175
<i>Qingwu W. Shen, Min Du, and Warrie J. Means</i>	
Chapter 10 AMP-Activated Protein Kinase in Muscle Growth, Fat Deposition, and Meat Quality.....	195
<i>Min Du, Qingwu W. Shen, Keith R. Underwood, Jun F. Tong, and Meijun Zhu</i>	

Chapter 11	Meat Color.....	217
	<i>Richard A. Mancini</i>	
Chapter 12	Lipid Oxidation and Flavor.....	227
	<i>D.U. Ahn, K.C. Nam, and E.J. Lee</i>	
Chapter 13	Lipids in Muscle: Structure, Composition, and Metabolism.....	247
	<i>Daniel C. Rule</i>	
Chapter 14	Fish Muscle	275
	<i>Peng Zhou and Joe M. Regenstein</i>	
Chapter 15	Molecular Mapping and Marker-Assisted Breeding for Muscle Growth and Meat Quality.....	287
	<i>Penny K. Riggs and Clare A. Gill</i>	
Chapter 16	Animal Agriculture and Animal Welfare: An Essay on How They Benefit Each Other in the Twenty-First Century	311
	<i>Joe M. Regenstein</i>	
Index		327