
Contents

Preface.....	vii
Acknowledgments	ix
Introduction	xi
About the editors.....	xv
Contributors.....	xvii

Section I: Carnitine homeostasis and tissue metabolism

Chapter 1 Carnitine homeostasis in humans	3
<i>Peggy R. Borum</i>	
Chapter 2 Role of carnitine in modulation of muscle energy metabolism and insulin resistance	11
<i>Tariq R. Altamimi and Gary D. Lopaschuk</i>	

Section II: Carnitine transport and metabolism in skeletal muscle

Chapter 3 The role of carnitine in the integration of skeletal muscle fuel metabolism.....	37
<i>Craig Porter</i>	
Chapter 4 Skeletal muscle carnitine transport.....	51
<i>Francis Stephens</i>	
Chapter 5 The metabolic impact of manipulating the skeletal muscle carnitine pool.....	63
<i>Benjamin T. Wall</i>	

Section III: Applications of carnitine in human nutrition

- Chapter 6 Carnitine metabolism and nutrition in dialysis patients... 79**
Eric P. Brass
- Chapter 7 Carnitine and insulin resistance 97**
Shawna Wicks, Robert Noland, and Randall Mynatt
- Chapter 8 Carnitine metabolism and nutrition in peripheral
arterial disease 127**
Giuseppe Maria Andreozzi
- Chapter 9 Carnitine as an ergogenic aid for sport performance 141**
Stuart D. R. Galloway and Elizabeth M. Broad
- Chapter 10 Summary remarks and future directions 159**
Craig Porter and Benjamin T. Wall