
Contents

Contributors	vii
Preface	xi
Part I: Central Pathways Involved in the Control of Food Intake and Energy Expenditure	
1. Orexigenic Peptides	1
<i>M.J. Morris and M.J. Hansen</i>	
2. Anorexigenic Peptides	33
<i>S. Perboni, N. Ueno, G. Mantovani and A. Inui</i>	
3. Newcomers and Supporting Actors	61
<i>J.A. Harrold and G. Williams</i>	
Part II: Peripheral Signals Participating in Energy Homeostasis and Obesity-associated Alterations	
4. The Gut as a Second Brain	93
<i>C.J. Small, K. Wynne and S.R. Bloom</i>	
5. Elements of the Adipostat	115
<i>H. Hauner</i>	
6. Natriuretic Peptides and Other Lipolytic Peptides Involved in the Control of Lipid Mobilization in Humans	133
<i>M. Lafontan, C. Sengenès, C. Moro, J. Galitzky and M. Berlan</i>	

7. The Adipo–Hepato–Insular Axis in Glucose Homeostasis	163
<i>J. Gómez-Ambrosi, V. Catalán and G. Frühbeck</i>	
8. Adipokines in the Immune–Stress Response	195
<i>R. Madani, N.C. Ogston and V. Mohamed-Ali</i>	
9. Peptides Involved in Vascular Homeostasis	229
<i>A. Rodríguez and G. Frühbeck</i>	
Part III: Integrative Perspectives	
10. Hierarchy of Neural Pathways Controlling Energy Homeostasis	263
<i>A. Abizaid and T.L. Horvath</i>	
11. Energy Regulatory Signals and Food Reward	285
<i>D. Figlewicz Lattemann, N.M. Sanders and A.J. Sipols</i>	
12. Embracing Complexity: The Emergence of Functional Neuroimaging and Other Methodologies to Study the Role of the Human Brain in the Pathophysiology of Obesity	309
<i>P.A. Tataranni, N. Pannacciulli, D.S.NT Le and A. Del Parigi</i>	
13. Overview of the Integrative Physiology of Adipose Tissue in Energy Homeostasis	331
<i>I. Dugail and M. Guerre-Millo</i>	
14. Application of ‘Omic’ Strategies to Obesity Research	349
<i>C. Henegar, S. Taleb, D. Langin, J.-D. Zucker and K. Clément</i>	
15. Implications for the Future of Obesity Management	369
<i>G.N. Chaldakov, A.B. Tonchev, M. Fiore, M.G. Hristova, R. Pancheva, G. Rancic and L. Aloe</i>	
Index	391