
Contents

1	Discovery of Leptin and Elucidation of Leptin Gene Expression	1
	Margherita Maffei	
2	Leptin Receptors and Mechanism of Action	15
	Julie Dam, Ralf Jockers, Michèle Guerre-Millo, and Karine Clément	
3	Leptin Interaction with Brain Orexigenic and Anorexigenic Pathways	25
	Denis G. Baskin	
4	Measurement of Circulating Leptin and Soluble Leptin Receptors	39
	Robert V. Considine	
5	Physiological and Hormonal Factors that Influence Leptin Production	45
	Sam Dagogo-Jack	
6	Leptin, Obesity, and Leptin Resistance.....	67
	Heike Münzberg and Steven B. Heymsfield	
7	Leptin and Intermediary Metabolism: Focus on Glucoregulation and Lipids	79
	Rachel C. Morgan and Robert V. Considine	
8	Pathogenesis of Hepatic Steatosis and Fibrosis: Role of Leptin	89
	Faidon Magkos, Elisa Fabbrini, and Samuel Klein	
9	Leptin in Acute Stress.....	103
	Stephen N. Davis, Elizabeth M. Lamos, Hillary Loper, and Lisa M. Younk	
10	Leptin and the Kidney	117
	Richa Pandey, Anubha Mutneja, Daniel W. Coyne, and Sam Dagogo-Jack	
11	Leptin, Immune Function, and Inflammation	131
	Giuseppe Matarese, Claudio Procaccini, Valentina Pucino, and Christos Mantzoros	

12 Leptin and Bone	145
Patricia Ducey and Stavroula Kousteni	
13 Leptin, Cell Cycle, and Cancer	163
Olorunseun O. Ogunwobi	
14 Leptin, the Autonomic Nervous System, and Hypertension	175
Alexandre A. da Silva, Jussara M. do Carmo, Zhen Wang, and John E. Hall	
15 Dynamic Leptin Secretion in Obesity and Diabetes	189
Sam Dagogo-Jack	
16 Leptin Therapy in People with Congenital Leptin Deficiency	203
Gilberto Paz-Filho and Julio Licinio	
17 Leptin Therapy in People with a Normal Leptin Gene	215
Steven B. Heymsfield and Heike Münzberg	
18 Leptin Therapy in Patients with Lipodystrophy and Syndromic Insulin Resistance	225
Rebecca J. Brown and Phillip Gorden	
19 Leptin Therapy in Women with Hypothalamic Amenorrhea	237
Sharon H. Chou and Christos Mantzoros	
20 Leptin Therapy as a Substitute for Insulin Replacement in Experimental Models of Diabetes: Clinical Implications in Humans	255
Satya Paul Kalra	
21 Novel Combinatorial Therapies Involving Leptin: Opportunities for Mechanistic Advances and Therapeutic Translation in Human Diseases	267
Timo D. Müller, Christoffer Clemmensen, Brian Finan, Richard D. DiMarchi, and Matthias H. Tschöp	
Index	281

Leptin

Regulation and Clinical Applications

Dagogo-Jack, S. (Ed.)

2015, XXIII, 287 p. 48 illus., 27 illus. in color., Hardcover

ISBN: 978-3-319-09914-9