Contents

1 Why Obesity in Parents Matters ........................................... 1
Mark Hanson

2 Maternal Obesity During Pregnancy and Cardiometabolic Development in the Offspring ........................................... 11
Romy Gaillard and Vincent W. Jaddoe

3 Maternal Obesity and Gestational Weight Gain as Determinants of Long-Term Health ........................................... 33
Nashita Patel and Lucilla Poston

4 Young Maternal Age, Body Composition and Gestational Intake Impact Pregnancy Outcome: Translational Perspectives ........................................... 57
Jacqueline Wallace

5 Maternal Obesity and Programming of the Early Embryo ........... 81
J.J. Eckert, M.A. Velazquez, and T.P. Fleming

6 Paternal Obesity and Programming of Offspring Health ............ 105
Tod Fullston, Helana S. Shehadeh, John E. Schjenken, Nicole O. McPherson, Sarah A. Robertson, Deirdre Zander-Fox, and Michelle Lane

7 The Impact of Maternal Obesity and Weight Loss During the Periconceptional Period on Offspring Metabolism .......................... 133
L.M. Nicholas and I.C. McMillen

8 Mechanisms Linking Maternal Obesity to Offspring Metabolic Health ......................................................... 163
Laura Dearden and Susan E. Ozanne

9 The Effect of Maternal Overnutrition on Reward and Anxiety in Offspring .............................................................. 187
Aya Sasaki, Suzanne Erb, and Patrick O. McGowan
10 The Implications of Maternal Obesity on Offspring Physiology and Behavior in the Nonhuman Primate
Elinor L. Sullivan and Paul Kievit

201

11 The Impact of Maternal Obesity on Offspring Obesity via Programmed Adipogenesis and Appetite
Michael G. Ross and Mina Desai

235

12 Developmental Programming of Nonalcoholic Fatty Liver Disease (NAFLD)
Kimberley D. Bruce and Felino R. Cagampang

255

13 Maternal Metabolic State and Cancer Risk: An Evolving Manifestation of Generational Impact
Frank A. Simmen, Melissa E. Heard, John Mark P. Pabona, Lorenzo M. Fernandes, Charles P. Mercado, and Rosalia C.M. Simmen

289

14 The Influence of Maternal Obesity on Offspring Cardiovascular Control and Insights from Rodent Models
Paul D. Taylor

307

15 Maternal Obesity Effects on the Risk of Allergic Diseases in Offspring
Katharine C. Pike and Liesbeth Duijts

335

16 Epigenetic Mechanisms of Maternal Obesity Effects on the Descendants
Paul Cordero, Jiawei Li, Jonathan L. Temple, Vi Nguyen, and Jude A. Oben

355

17 Early Microbe Contact in Defining Child Metabolic Health and Obesity Risk
Erika Isolauri, Samuli Rautava, Maria Carmen Collado, and Seppo Salminen

369
Parental Obesity: Intergenerational Programming and Consequences
Green, L.R.; Hester, R.L. (Eds.)
2016, XII, 389 p. 32 illus., 22 illus. in color., Hardcover