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FOREWORD

Obesity and childhood

Krista R Casazza & Lynae J Hanks

Approximately 17% of children and adolescents (defined by the US CDC as ages 2–19 years) are obese in the USA [1]; however, this is not a problem seen only in high-income countries and prevalence in low- and middle-income countries continues to increase. In fact, the WHO has declared childhood obesity to be one of the most serious public health challenges of the 21st century [2]. Childhood obesity is associated with increased risk for a number of health conditions, including cardiovascular and metabolic diseases, with earlier onset rendering more dire consequences. While prevention is the ultimate goal, treatment and a return to a healthy weight can see outcomes in these individuals return to levels similar to those of never-obese individuals. In this book, international experts review the

current understanding of prediction, diagnosis and treatment of childhood obesity and also explore the concept of prevention across the lifespan with the goal of aiding clinicians and healthcare providers in providing effective care for obese children and their families.

In **Chapter 1**, Braet and colleagues review advances in research that provide indications towards the factors that influence childhood overweight and obesity. They discuss these in the Ecological Systems Theory framework, which acknowledges multifactorial interaction of hereditary, environmental and child characteristics to help understand the development of overweight and obesity and use this knowledge to guide prevention and treatment strategies.

The editors of this book and colleagues from University of Alabama at Birmingham (AL, USA) examine contributors to pediatric obesity beyond the heritability aspects related to BMI in **Chapter 2** and review the interaction of genetic, physiological and environmental factors to help understand obesity phenotypes.

Examining the powerful role that parents can have on eating and activity levels and on body satisfaction, in **Chapter 3**, Golan looks at how parents can mediate the impact of an obesogenic environment on their own family environment. The success and downfalls of different parenting styles and how parents can be brought into childhood weight management intervention schemes are discussed.

Messito reviews rising childhood obesity rates from a public health perspective in **Chapter 4** and highlights how understanding of societal and family behavior and increasing prevalence in at-risk populations can be used to target preventative efforts effectively.

Building on the other chapters, Duffine and Volpe examine the rising epidemic from the perspective of the environment, focusing in particular on dietary patterns and eating behavior. In **Chapter 5**, they continue themes such as parental involvement and

self-regulation, while also exploring areas such as food marketing and the school food environment, culminating in a discussion of the cultural shift that may be essential to initiate a true change in obesity prevalence.

Throughout **Chapter 6**, Minshall and Alexander review psychosocial stresses in pediatric obesity, in particular, asking the question “what comes into the room with an obese child and their parents?” Examining bullying and parent-related psychosocial stresses, they look at how the burden of weight management treatment can impact on a family’s ability to cope and the importance of considering this to help reduce drop out from treatment programs.

Finally, in **Chapter 7**, the editors respond to questions posed by the chapter authors on the topic of intervention and special considerations for sex, stage of development and ethnicity. This provides high-level discussion of areas of clear importance to experts active in this area that we anticipate readers finding particularly useful.

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The authors have no relevant affiliations or financial involvement with any organization or entity with a financial

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Websites

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