

CHILDHOOD OBESITY PREVENTION AND MANAGEMENT, AS WELL AS PSYCHOLOGICAL AND HEALTH COMORBIDITIES

Justin D. Smith,
University of Utah School of Medicine, USA

Abstract (600 Word limit):

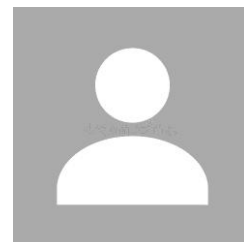
Obesity in children has become a global epidemic in industrialized countries, resulting in a slew of medical issues that contribute to increased morbidity and mortality. Obesity in children and adolescents has several origins, which presents researchers and physicians with a variety of obstacles in preventing and managing the disease. This chapter summarizes the current state of knowledge about the etiology of childhood obesity, as well as the preventive and treatment options for overweight and obesity, as well as the medical complications and co-occurring psychological conditions that can result from excess adiposity, such as hypertension, non-alcoholic fatty liver disease, and depression. Interventions are examined across the developmental spectrum, at different risk levels, and in different service contexts (e.g., community, school, family, and healthcare systems). Future study directions are suggested, with a focus on translational research. In this review, we describe the scope and nature of the childhood obesity pandemic, present conceptual and theoretical models for understanding its etiology, and review intervention approaches within and across developmental stages, as well as in the various contexts in which childhood OW/OB interventions are delivered, from a translational-developmental perspective. We pay special attention to co-occurring psychological problems in children, adolescents, and their families that are linked to OW/OB in terms of development/etiology and intervention. As a result, our evaluation starts with preventative strategies before moving on to management and treatment options for obesity and associated psychological and medical comorbidities. Then we go over the current state of the science and expert recommendations for treatments to prevent and manage childhood OW/OB, as well as what it would take to put current guidelines into practice.

Importance of research (200 Word Limit)

This section examines the current level of knowledge in the prevention and management of OW/OB in children, as well as key issues affecting their implementation in various healthcare delivery systems. The American Medical Association's position is influencing the present climate. Obesity was classified as an illness requiring medical attention by the Board in 2013. The goal of this classification was to highlight the health hazards of obesity, remove individual blame, and provide new implications and intervention options. This classification can aid in: 1) a greater public knowledge of obesity and its stigma; 2) prevention efforts; 3) treatment and management research; 4) intervention insurance reimbursement; and 5) medical education. The US Preventive Services Task Force (USPSTF) focuses on primary care settings. In recent years, a number of high-quality systematic reviews and meta-analyses have been published, providing the most up-to-date perspective on the effectiveness of preventative and management strategies but also exposing vast variability and inconsistent findings.

Biography (150 Word limit):

Justin D. Smith and Emily Fu has her expertise in Implementation of family-centered prevention and health promotion programs in real-world delivery systems Family processes in the development and prevention of pediatric obesity. He has completed MA and PhD in University of Tennessee and completed his Postdoctoral Fellow: University of Oregon, Development and Psychopathology and developed evaluation of individually-tailored and adaptive interventions longitudinal modeling. He did Analysis and design of time-series experiments for intervention effects.





Information of Institute/ University/ Laboratory: (200 Word Limit)

The University Of Utah School Of Medicine was founded in 1905 as a two-year medical school and transitioned to a four-year, medical-degree-granting institution in 1941. The School of Medicine is located on the upper campus of the University of Utah in Salt Lake City, Utah. It serves as the only MD-granting institution in the state of Utah and as the only academic medical center in the Intermountain West. The University of Utah Spencer Fox Eccles School of Medicine serves all people and communities of Utah and the Intermountain West by intentionally supporting and improving individual and community

health outcomes and quality of life. This is achieved through excellence in equitable patient care.

References (15-20):

Neira M, de Onis M. The Spanish strategy for nutrition, physical activity and the prevention of obesity. *British Journal of Nutrition*. 2006 Aug;96(S1):S8-11.

1. [Doak C. Large-scale interventions and programmes addressing nutrition-related chronic diseases and obesity: examples from 14 countries. *Public Health Nutrition*. 2002 Feb;5\(1a\):275-7.](#)
2. Morrison CD, Berthoud HR. Neurobiology of nutrition and obesity. *Nutrition reviews*. 2007 Dec 1;65(12):517-34.
3. Delzenne NM, Cani PD. Interaction between obesity and the gut microbiota: relevance in nutrition. *Annual review of nutrition*. 2011 Aug 21;31:15-31..
4. Bell AC, Swinburn BA. What are the key food groups to target for preventing obesity and improving nutrition in schools?. *European journal of clinical nutrition*. 2004 Feb;58(2):258-63.
5. Choban PS, Dickerson RN. Morbid obesity and nutrition support: is bigger different?. *Nutrition in clinical practice*. 2005 Aug;20(4):480-7.
6. [Guillaume M, Lapidus L, Lambert A. Obesity and nutrition in children. *The Belgian Luxembourg child study IV. European journal of clinical nutrition*. 1998 May;52\(5\):323-8.](#)
7. Ajie WN, Chapman-Novakofski KM. Impact of computer-mediated, obesity-related nutrition education interventions for adolescents: a systematic review. *Journal of Adolescent Health*. 2014 Jun 1;54(6):631-45.
8. Cofield SS, Corona RV, Allison DB. Use of causal language in observational studies of obesity and nutrition. *Obesity facts*. 2010;3(6):353-6..
9. Popkin BM, Gordon-Larsen P. The nutrition transition: worldwide obesity dynamics and their determinants. *International journal of obesity*. 2004 Nov;28(3):S2-9.
10. Swinburn BA, Caterson I, Seidell JC, James WP. Diet, nutrition and the prevention of excess weight gain and obesity. *Public health nutrition*. 2004 Feb;7(1a):123-46.
11. Johnson IT, Lund EK. Nutrition, obesity and colorectal cancer. *Alimentary pharmacology & therapeutics*. 2007 Jul;26(2):161-81.
12. Garaulet M, Madrid JA. Chronobiological aspects of nutrition, metabolic syndrome and obesity. *Advanced drug delivery reviews*. 2010 Jul 31;62(9-10):967-78.
13. Caballero B. A nutrition paradox—underweight and obesity in developing countries. *N engl j med*. 2005 Apr 14;352(15):1514-6.
14. Astrup A, Dyerberg J, Selleck M, Stender S. Nutrition transition and its relationship to the development of obesity and related chronic diseases. *Obesity reviews*. 2008 Mar

15. de Schampheleire I, Parent MA, Chatteur C: Excessive carbohydrate intake in pregnancy and neonatal obesity: study in Cap Bon, Tunisia. Arch Dis Child. 1980, 55: 521-526.

Tadmouri GO, Bissar-Tadmouri N: A major pitfall in the search strategy on PubMed. Saudi Med J. 2004, 25: 7-10.