



Commentary: Control of Body Weight by Eating Behavior in Children

Tony Kuo*

Los Angeles County Department of Public Health, Los Angeles, CA, USA

Keywords: child obesity, food environment, speed of eating, body weight, public health

A commentary on

Control of body weight by eating behavior in children

by Zandian M, Bergh C, Ioakimidis I, Esfandiari M, Shield J, Lightman S, et al. *Front Pediatr* (2015) 3:89. doi: 10.3389/fped.2015.00089

Zandian and colleagues' article on the control of body weight by eating behavior in children draws upon the experience of several disciplines. They reviewed the evidence for the impact of brain physiology, genetics, diet and exercise, and pharmacological interventions in counteracting the worldwide increase in pediatric body weight (1). The authors concluded that a reason for the limited success of these and other weight control interventions in the past has been the misinterpretation of where the locus of control lies – that is, “body weight is mainly under external control” as opposed to the viewpoint that cognition plays a predominant role. This and other conclusions in the article are not new *per se*, as the foundation for addressing “external control” factors is deeply rooted in public-health practice. Indeed, public-health interventions that have focused on policies, systems, and environmental changes in the community have become popular in recent years and have been used extensively by a number of health authorities in developed countries (2). In the United States, for example, growing number of federal initiatives are introducing non-traditional, non-medical strategies to address the rising weight of children. These strategies have included targeted efforts, such as land use policies that support walking in the community; joint use agreements between schools and community entities to increase open space for physical activity; implementation of active transportation policies to improve the walkability of neighborhoods; and mandatory nutrition guidelines in food venues across a range of settings to promote low-energy and low-sugar foods (3). In most cases, these multisector efforts targeted socioecological influences (2) or “external control” factors that Zandian and colleagues alluded to. However, the authors suggested that child obesity shared similarities with the physiological constructs of eating disorders, such as anorexia, and based on these similarities, they concluded that the speed of eating as controlled through computerized feedback technology could be featured in the fight against the obesity epidemic (1, 4). Although intriguing and supported by data from a randomized controlled trial (4), Zandian et al.'s recommendation requires clarification of context and further investigation, as the limited success of the aforementioned diet, exercise, and pharmacological interventions all share common problems – evidence of efficacy and proof-of-concept are available, but research on scale and spread, which affects real world implementation, are not (5). In short, although the authors' effort to address the “external control” factors that drive the obesity epidemic aligns well with most health authorities' approach to this public-health problem, their focus on using computerized feedback seems somewhat counterintuitive to their own conclusion. The latter remains focused on cognition and individual health education support, is health systems centric, and may not dramatically improve the actual food environments that influence consumer (parental) choice, especially for those who live in low socioeconomic status areas.

OPEN ACCESS

Edited by:

Frederick Robert Carrick,
Carrick Institute, USA

Reviewed by:

Susan Elizabeth Esposito,
Life University, USA
Linda Mullin Elkins,
Life University, USA

*Correspondence:

Tony Kuo
tkuo@ph.lacounty.gov

Specialty section:

This article was submitted to *Child Health and Human Development*, a section of the journal *Frontiers in Pediatrics*

Received: 07 February 2016

Accepted: 16 February 2016

Published: 01 March 2016

Citation:

Kuo T (2016) Commentary: Control of Body Weight by Eating Behavior in Children. *Front. Pediatr.* 4:14. doi: 10.3389/fped.2016.00014

AUTHOR CONTRIBUTION

The author confirms being the sole contributor of this work and approved it for publication.

REFERENCES

1. Zandian M, Bergh C, Ioakimidis I, Esfandiari M, Shield J, Lightman S, et al. Control of body weight by eating behavior in children. *Front Pediatr* (2015) 3:89. doi:10.3389/fped.2015.00089
2. Story M, Kaphingst KM, Robinson-O'Brien R, Glanz K. Creating healthy food and eating environments: policy and environmental approaches. *Annu Rev Public Health* (2008) 29:253–72. doi:10.1146/annurev.publhealth.29.020907.090926
3. Bunnell R, O'Neil D, Soler R, Payne R, Giles WH, Collins J, et al. Fifty communities putting prevention to work: accelerating chronic disease prevention through policy, systems, and environmental change. *J Community Health* (2012) 37(5):1081–90. doi:10.1007/s10900-012-9542-3
4. Bergh C, Callmar M, Danemar S, Hölcke M, Isberg S, Leon M, et al. Effective treatment of eating disorders: results at multiple sites. *Behav Neurosci* (2013) 127(6):878–89. doi:10.1037/a0034921
5. Peters DH, Adam T, Alonge O, Agyepong IA, Tran N. Implementation research: what it is and how to do it. *Br Med J* (2013) 347:f6753. doi:10.1136/bmj.f6753

Conflict of Interest Statement: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2016 Kuo. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.