

The Health at Every Size Paradigm and Obesity: Missing Empirical Evidence May Help Push the Reframing Obesity Debate Forward

Tarra L. Penney, BSc, MA, and Sara F. L. Kirk, PhD

A Health at Every Size (HAES) approach has been proposed to address weight bias and stigma in individuals living with obesity, and more recently articulated as a promising public health approach beyond the prevailing focus on weight status as a health outcome. The purpose of this article is to examine our understanding of HAES within the context of public health approaches to obesity, and to present strengths and limitations of the available evidence. Advancing our understanding of HAES from a public health perspective requires us to move beyond an ideological debate and give greater attention to the need for empirical studies across a range of populations. Only then can the value of HAES, as a weight-neutral, public health approach for the prevention of obesity and other chronic diseases, be fully understood. (*Am J Public Health*. 2015;105:e38–e42. doi:10.2105/AJPH.2015.302552)

A recent Framing Health Matters article in the *American Journal of Public Health* highlighted the potential for Health at Every Size (HAES) to be framed as a public health approach to obesity,¹ and included a focus on the need for a weight-neutral approach to address the unique social challenges of weight stigma and bias.² This is an important and admirable goal, but one that may benefit from some additional clarifications and considerations. In a response to this earlier article, we seek to (1) describe the context in which the HAES paradigm has emerged, (2) further examine the current evidence for the effect of HAES principles on a range of health-related outcomes, and (3) reflect on the adequacy of this evidence within the context of public health approaches to obesity.

THE CURRENT DEBATE FOR FRAMING OBESITY

The problem of what to do about rising obesity rates is a major preoccupation of the early 21st century, as the number of overweight people in the world was observed to equal the number of underfed people.³ Obesity has been linked with a range of chronic diseases including type 2 diabetes, hypertension, several cancers, gallbladder disease,

coronary artery disease, and stroke.^{4,5} As a result, reducing obesity rates is a target for public health action, and existing approaches to obesity management and prevention are under intense scrutiny.

Debate over the impact of obesity, both direct and indirect, on public health has also exploded in the literature, particularly over the past 10 to 15 years. This has included critics who suggest that obesity has been primarily framed within a medical discourse, thereby creating a great deal of social anxiety and “fear of fatness,” which in turn has contributed to a focus on individual responsibility related to body weight and size.⁶ However, it is difficult to discern the source of the public discourse, as media reports have been found to lead the discussion with 72% to 98% of obesity-related reports emphasizing individual responsibility for weight, compared with scientific papers (approximately 40%).⁷

Regardless of the primary driver of public discourse, an individual focus on obesity has resulted in a proliferation of intervention studies seeking to improve the health of individuals through weight reduction, the long-term effectiveness of which has been questioned.⁸ Certainly, traditional medical or behaviorally based intervention efforts for obesity have focused on pharmacological,

surgical, or behavioral strategies with varying degrees of success.⁹ Long-term sustainability of interventions is particularly disappointing, with participants regaining on average 30% to 40% of their lost weight within 1 year, and longer-term follow-up (2–5 years) showing a gradual return to baseline weight levels or above.¹⁰ Taken alongside the devastating effects of bias and stigma experienced by individuals seeking weight management support,^{11–13} the prevalent assumption that a weight-focused approach to obesity management is either appropriate or effective has increasingly been challenged.^{8,14} Some critics have gone further, questioning whether an “obesity epidemic” truly exists.^{15,16}

A consequence of this dichotomized debate has been the subsequent polarization of those involved into obesity “alarmists” and “skeptics.”¹⁵ Whereas alarmists are perceived as viewing obesity as an issue to be managed, skeptics may advocate a move away from weight as a focus, typically referred to as a HAES philosophy.¹⁷ Proponents of HAES suggest that this approach is more effective and less dangerous than more medicalized approaches to weight management.¹⁷ The HAES approach does not focus on any measure of body weight, shape, or size, but instead encourages a “fulfilling and meaningful lifestyle” through eating according to internally directed signals of hunger or satiety and engaging in what is termed reasonable levels of physical activity.¹⁷ The HAES approach is intuitively appealing, but what is the evidence that it is appropriate from a public health perspective?

WHAT WE KNOW ABOUT THE HEALTH AT EVERY SIZE APPROACH

In shifting the focus from a weight-focused to a health-focused paradigm, HAES challenges some of the key assumptions of traditional

approaches to weight management. These include

1. that adiposity poses significant morbidity and mortality risk,
2. that weight loss will prolong life,
3. that anyone who is determined can lose weight and keep it off through appropriate diet and exercise,
4. that the pursuit of weight loss is a practical and positive goal,
5. that the only way for people living with obesity to improve health is to lose weight, and
6. that obesity-related costs place a large burden on the economic and health system, and this can be corrected by focused attention to obesity treatment and prevention.¹⁴

As an alternative, HAES proposes that we (1) encourage body acceptance, (2) support intuitive eating, and (3) support active embodiment.^{14,18} Within the HAES approach, it has been suggested that any intervention strategy for obesity should be one that promotes the development of a healthy lifestyle; this includes outcomes to evaluate success that are not limited to, and in fact may exclude, body weight or body composition.¹⁹ Techniques and tools to promote a HAES approach have been developed²⁰ to support health professionals in challenging the assumption that everyone responds to treatment in the same manner and to explore clients' feelings to discover the root of their behaviors.²¹

The HAES philosophy is relatively new, with most literature only starting in the early 2000s. The HAES principles emerged partially in response to the lack of success of traditional approaches to weight management.²¹ As a result, HAES proponents argue that traditional weight loss approaches provide a false hope to individuals seeking to lose weight. Instead, the HAES perspective suggests that, not only are traditional approaches ineffective, but dieting and restriction also cause physical, emotional, and spiritual distress.²² When individuals experiencing obesity ultimately "fail" when they use the prevailing "eat less, move more" prescription, or do not lose a predetermined amount of weight, HAES advocates point out that these "failures" can make individuals feel that they are not normal, or cannot be healthy

unless they reach some narrowly defined and socially constructed body size. These feelings of failure, in turn, can lead to discrimination and prejudice directed at people experiencing overweight or obesity, further propelling behaviors that may contribute to disordered eating or excessive exercise.^{21,23}

The main components of the HAES approach are intuitive eating, body acceptance regardless of size or shape, and physical activity for movement and health rather than for elite performance or to shape the body.¹⁴ The concept of intuitive eating, which encourages an individual to respond to internal cues of hunger and satiety rather than external cues of specific meal times or events, is thought to prevent negative body image and disordered eating.¹⁹ For body acceptance, when women of any age group perceived that others accepted their body, they too felt more appreciative toward their own body, which is positively related to intuitive eating. Interestingly, body mass index (BMI; weight in kilograms divided by the square of height in meters) did not predict women's body appreciation, but the acceptance of their body by significant others and society did.²⁴ In a similar study, body acceptance by others predicted an emphasis on body function over appearance, which then predicted improved body appreciation and success at intuitive eating.²⁵

In addition to interventions specifically looking at the importance of intuitive eating and body acceptance, interventions based on HAES have been conducted with individuals with metabolic syndrome. One study examined the effects of a nondieting lifestyle intervention program over 3 months on metabolic fitness and psychological well-being among premenopausal, clinically obese women. This approach was effective in reducing psychological distress and increasing cardiorespiratory fitness among these previously sedentary females, with modest nonsignificant reductions in body mass compared with controls.²⁶

Additional comprehensive HAES interventions that have been evaluated include a study showing that HAES group members maintained weight and improved metabolic fitness (e.g., blood pressure and lipids), energy expenditure, eating behavior, and psychology (e.g., self-esteem, depression, and body image).²⁷ Moreover, these improvements were sustained

compared with the diet group at 1 year.²⁷ The authors concluded that the HAES approach enabled participants to maintain long-term behavior change whereas the diet approach did not; although the diet group did lose weight, this was not maintained at follow-up.²⁷

In another HAES intervention on psychological variables and body weight in weight-preoccupied women who were also defined as overweight or obese, little difference between groups was observed during the intervention phase.²⁸ However, during follow up, the HAES group continued to improve whereas the other groups did not.²⁸ Also, a HAES intervention on eating behaviors and appetite ratings in premenopausal women defined as overweight showed decreases in susceptibility to hunger in the HAES group.²⁹ However, the weight loss of women from the HAES group did not differ significantly from the social support and control groups.²⁹

Similar work again has been done on premenopausal overweight woman and their dietary intakes and eating patterns, with no significant impact found on eating patterns, but a decrease in reported hunger.³⁰ A study that examined anthropometric and metabolic factors alongside appetite-related and physical activity behaviors found that, compared with a control group, a HAES approach could have longer-term (i.e., 16-month follow-up) beneficial effects on eating behaviors related to disinhibition and hunger. There were also no distinct effects of the HAES approach when these outcomes were compared with the social support group.³¹

HEALTH AT EVERY SIZE WITHIN THE CONTEXT OF PUBLIC HEALTH APPROACHES TO OBESITY

The HAES studies discussed in the previous section demonstrate an important contribution to our understanding of how these principles can support health and well-being. Of particular interest is the ability of a HAES intervention to show maintained treatment effects related to dietary behavior, self-efficacy, and improved body image postintervention with some including postintervention weight reduction. In addition, HAES focuses on reducing the social stigma and discrimination experienced by many individuals with higher body weights,

to improve quality of life.^{20,32,33} Although not related to weight reduction, which, according to HAES principles, it does not attempt to alter anyway, weight measures when collected sometimes showed an improvement compared with baseline.

In addition to these longer-lasting treatment effects, there appears to be a psychological and potential physical benefit to the HAES approach, particularly with respect to women experiencing disordered eating or chronic dieting behaviors alongside issues of overweight or obesity. The HAES approach values bodies of all sizes, and seems to provide more social support for body acceptance. It also seeks to disentangle the value individuals hold toward themselves as people and their adherence to social pressures to fit an ideal aesthetic.

However, the HAES approach does have some important limitations as a public health approach to obesity. These relate to intervention study size and design, generalizability to other populations (e.g., gender, individuals with higher BMI, and those without disordered eating) and its applicability to certain proximal personal and social influences. Existing studies tend to comprise small sample sizes, limited evaluation of physiological outcomes, inclusion of individuals with BMI within the overweight and class I obesity range rather than class II or III (the fastest growing BMI ranges across the globe³⁴), a tendency to treat obesity behaviorally by focusing on individual characteristics to the exclusion of environmental influences, and a focus on female White participants with a history of binge eating or chronic dieting in Western cultures. This approach may not be appropriate for individuals with a genetic predisposition to obesity attributable to the ease of weight gain and resistance to weight loss that might occur in these individuals. Nor does it consider the value of modest weight reduction (5%–10%) in improving health.³⁵ More important from a public health perspective is that we have no data on the scalability of this approach to the general population. Despite the promise shown by HAES approaches, we should therefore be cautious about generalizing these results beyond their intended target populations. Until these limitations are adequately addressed, promoting HAES as a public health approach to obesity is likely premature.³²

A NEED FOR FURTHER EMPIRICAL EVIDENCE TO SUPPORT ADDITIONAL DIALOGUE

With respect to the existing evidence discussed in the previous section, there are 2 key issues that are important to consider with respect to HAES as a public health response to obesity. First, it highlights the benefits and risks of framing obesity as a disease in and of itself versus viewing it as a risk factor for other medical diseases including type 2 diabetes or metabolic syndrome.³⁶ Having disease status allows for the allocation of additional resources to support weight management, such as equipment for individuals experiencing obesity within critical care or birthing units and training health professionals in appropriate methods for managing obesity more effectively.^{37,38} The question that remains unanswered is whether adipose tissue itself is pathological to an individual and, if so, at what point does it transform from extra weight to a “disease”? This question will likely need to be answered from the area of clinical obesity research.

By focusing on body acceptance, the HAES approach has made some impressive strides in translating an antistigma approach to the way that interventions are delivered. In addition, HAES proponents believe that their approach is appropriate for public policy insofar as it addresses stigma. However, missing from the debate thus far is whether HAES is an appropriate approach for individuals living with class II and III obesity for whom modest weight reduction could bring important health benefits.³⁵

The second issue of note is the need for a public health approach if we are to have any chance of successfully restructuring our current obesogenic environments and how they interact with individual characteristics and behavior.³⁹ Bombak highlighted the challenges associated with restructuring obesogenic environments, but rather than dismissing this approach as unworkable, we argue that there is an important moral—and, therefore, public health—imperative to the creation of supportive environments to support overall health.¹ The focus in HAES is on reducing restriction of food intake and attention paid to health behaviors in favor of a more intuitive process.

This is seen as connecting individuals more firmly with their internal cues of hunger and satiety, and although it may improve psychological well-being, is it an appropriate population health approach if one considers our current obesogenic environment?

It has been suggested that a great deal of cognitive control is required to successfully overcome the incentives, rewards, and contingencies offered by the obesogenic environment.^{40,41} These include energy-dense, nutrient-poor foods that are widely available in large portion sizes and at a low cost compared with healthier foods.^{40,41} It has also been suggested that these environmental characteristics create a “slope” that, combined with genetic predispositions, create cycles of poor health behaviors and weight gain that are incredibly challenging to slow down or even reverse. This suggests that the best approach is to change the characteristics of the environment (i.e., flatten out the slope) so that behaviors normalize as a consequence.⁴²

The implications of an individual focus on health status (and a reduction of obesity and chronic disease as a consequence) provide little consideration of the many social, economic, and physical barriers that contribute to the development of lifestyle-related disease. While we fund, develop, design, implement, and evaluate countless individually focused obesity management programs, we are potentially overlooking the necessary evidence and actions required to address the structural and social changes that may have a significant impact on this health issue, and its behavioral determinants including unhealthy eating and physical inactivity.⁴³

It has been highlighted that sustained improvements in obesity management and prevention are more likely to occur in the area of public health. This includes laws and regulations to mitigate the many environmental factors associated with the development and ongoing management of obesity. This will also require stronger public health initiatives to modify the behaviors and habits of everyone, regardless of weight status. However, these approaches require political and societal will, both of which are challenging to harness within an individualistic focus on health, whether or not that focus includes weight status.

CONCLUSIONS

There is clearly a need for social change related to the acceptance of individuals regardless of body shape or size. The likely way forward may well be through extracting the most relevant and salient aspects of traditional and HAES approaches, but additional empirical evidence is also needed. Moving away from weight-based discourse makes sense, particularly in the domain of health. However, where HAES may create additional social and political challenges is in its desire to remove weight entirely from the discussion. The reasons for this are understandable, in light of the poor long-term outcomes of traditional approaches to weight management. Yet doing so may serve to further marginalize those individuals who want support from the health system for weight management, especially those who suffer from health consequences of obesity and are unable to make the necessary behavioral changes without additional support.⁴⁴

It is also not yet clear if the HAES approach alone can reduce weight stigma and bias at a population level, without broader efforts to change societal norms and attitudes. Although conceptual debate is critical, it alone may not be sufficient to inform policy and practice without further empirical evidence to address current limitations. Rather than a debate that is polarized, we need to seek a common ground, working together to improve health and well-being for everyone. This requires stronger empirical evidence (i.e., larger, more representative populations), not only ideological discourse, on which to frame the debate. ■

About the Authors

Tarra L. Penney and Sara F.L. Kirk are with Applied Research Collaborations for Health, School of Health and Human Performance, Dalhousie University, Halifax, Nova Scotia.

Correspondence should be sent to Tarra L. Penney, Centre for Diet and Activity Research, MRC Epidemiology Unit, University of Cambridge, Box 285, Institute of Metabolic Science, Cambridge Biomedical Campus, Cambridge, UK CB2 0QQ (e-mail: tlp28@medschl.cam.ac.uk). Reprints can be ordered at <http://www.ajph.org> by clicking the "Reprints" link.

This article was accepted December 31, 2014.

Contributors

T. L. Penney originated the study, conducted the literature review, and drafted the initial article. S. F. L. Kirk provided conceptual guidance, and contributed to the drafting and revision of article content.

Acknowledgments

T. L. Penney would like to acknowledge support from a Nova Scotia Health Research Foundation Scotia Support Award to S. F. L. Kirk Dalhousie University. S. F. L. Kirk acknowledges salary support from a Canada Research Chair in Health Services Research (funded by the Canadian Institutes of Health Research).

Human Participant Protection

Institutional review board approval was not required for this literature review and commentary as human participants were not involved.

References

- Bombak A. Obesity, health at every size, and public health policy. *Am J Public Health*. 2014;104:e60–e67.
- Puhl RM, Heuer CA. The stigma of obesity: a review and update. *Obesity (Silver Spring)*. 2009;17(5):941–964.
- Gardner G, Halweil B, Peterson JA. *Underfed and Overfed: The Global Epidemic of Malnutrition*. Washington, DC: Worldwatch Institute; 2000.
- Khoadhiar L, McCowen KC, Blackburn GL. Obesity and its comorbid conditions. *Clin Cornerstone*. 1999;2(3):17–31.
- World Health Organization. Obesity: preventing and managing the global epidemic. Report of a WHO consultation. 2000:i–xii, 1–253. World Health Organization Technical Report Series 894.
- Murray S. Pathologizing "fatness": medical authority and popular culture. *Sociol Sport J*. 2008;25:7–21.
- Saguy AC, Almeling R. Fat in the fire? Science, the news media, and the "obesity epidemic." *Sociol Forum*. 2008;23:53–83.
- Hafekost K, Lawrence D, Mitrou F, O'Sullivan TA, Zubrick SR. Tackling overweight and obesity: does the public health message match the science? *BMC Med*. 2013;11:41.
- Hainer V, Toplak H, Mitrakou A. Treatment modalities of obesity: what fits whom? *Diabetes Care*. 2008;31(suppl 2):S269–S277.
- Perri MG. The maintenance of treatment effects in the long-term management of obesity. *Clin Psychol Sci Pract*. 1998;5:526–543.
- Schwartz MB, Chambliss HO, Brownell KD, Blair SN, Billington C. Weight bias among health professionals specializing in obesity. *Obes Res*. 2003;11(9):1033–1039.
- Puhl RM, Brownell KD. Psychosocial origins of obesity stigma: toward changing a powerful and pervasive bias. *Obes Rev*. 2003;4(4):213–227.
- Puhl R, Peterson JL, Luedicke J. Fighting obesity or obese persons? Public perceptions of obesity-related health messages. *Int J Obes (Lond)*. 2013;37(6):774–782.
- Bacon L, Aphramor L. Weight science: evaluating the evidence for a paradigm shift. *Nutr J*. 2011;10:9.
- Gard M. Truth, belief and the cultural politics of obesity scholarship and public health policy. *Crit Public Health*. 2011;21(1):37–48.
- Campos P, Saguy A, Ernberger P, Oliver E, Gaesser G. The epidemiology of overweight and obesity: public

health crisis or moral panic? *Int J Epidemiol*. 2006;35(1):55–60.

- Robison J. Health at every size: toward a new paradigm of weight and health. *MedGenMed*. 2005;7(3):13.
- O'Keefe JH, Vogel R, Lavie CJ, Cordain L. Achieving hunter-gatherer fitness in the 21(st) century: back to the future. *Am J Med*. 2010;123(12):1082–1086.
- Miller WC. Fitness and fatness in relation to health: implications for a paradigm shift. *J Soc Issues*. 1999;55:207–219.
- Brown LB. Teaching the "health at every size" paradigm benefits future fitness and health professionals. *J Nutr Educ Behav*. 2009;41(2):144–145.
- Miller WC. The weight-loss-at-any-cost environment: how to thrive with a health-centered focus. *J Nutr Educ Behav*. 2005;37(suppl 1):S89–S94.
- Outland L. Intuitive eating a holistic approach to weight control. *Holist Nurs Pract*. 2010;24(1):35–43.
- Robison J, Putnam K, McKibbin L. Health at every size: a compassionate, effective approach for helping individuals with weight-related concerns—part II. *AAOHN J*. 2007;55(5):185–192.
- Augustus-Horvath CL, Tylka TL. The acceptance model of intuitive eating: a comparison of women in emerging adulthood, early adulthood, and middle adulthood. *J Couns Psychol*. 2011;58(1):110–125.
- Avalos LC, Tylka TL. Exploring a model of intuitive eating with college women. *J Couns Psychol*. 2006;53(4):486–497.
- Carroll S, Borkoles E, Polman R. Short-term effects of a non-dieting lifestyle intervention program on weight management, fitness, metabolic risk, and psychological well-being in obese premenopausal females with the metabolic syndrome. *Appl Physiol Nutr Metab*. 2007;32(1):125–142.
- Bacon L, Stern JS, Van Loan MD, Keim NL. Size acceptance and intuitive eating improve health for obese, female chronic dieters. *J Am Diet Assoc*. 2005;105(6):929–936.
- Gagnon-Girouard M-P, Bégin C, Provencher V, et al. Psychological impact of a "health-at-every-size" intervention on weight-preoccupied overweight/obese women. *J Obes*. 2010;2010:pii: 928097.
- Provencher V, Bégin C, Tremblay A, Mongeau L, Boivin S, Lemieux S. Short-term effects of a "health-at-every-size" approach on eating behaviors and appetite ratings. *Obesity (Silver Spring)*. 2007;15(4):957–966.
- Leblanc V, Provencher V, Bégin C, Corneau L, Tremblay A, Lemieux S. Impact of a health-at-every-size intervention on changes in dietary intakes and eating patterns in premenopausal overweight women: results of a randomized trial. *Clin Nutr*. 2012;31(4):481–488.
- Provencher V, Bégin C, Tremblay A, et al. Health-at-every-size and eating behaviors: 1-year follow-up results of a size acceptance intervention. *J Am Diet Assoc*. 2009;109(11):1854–1861.
- King C. Health at every size approach to health management: the evidence is weighed. *Topics Clin Nutr*. 2007;22(3):272–285.
- Gast J, Hawks SR. Weight loss education: the challenge of a new paradigm. *Health Educ Behav*. 1998;25(4):464–473.

34. Katzmarzyk PT, Mason C. Prevalence of class I, II and III obesity in Canada. *CMAJ*. 2006;174(2):156–157.
35. Wing RR, Lang W, Wadden TA, et al. Benefits of modest weight loss in improving cardiovascular risk factors in overweight and obese individuals with type 2 diabetes. *Diabetes Care*. 2011;34(7):1481–1486.
36. Rössner S. Obesity: the disease of the twenty-first century. *Int J Obes Relat Metab Disord*. 2002;26(suppl 4):S2–S4.
37. Watkins ML, Rasmussen SA, Honein MA, Botto LD, Moore CA. Maternal obesity and risk for birth defects. *Pediatrics*. 2003;111(5 pt 2):1152–1158.
38. Mauro M, Taylor V, Wharton S, Sharma AM. Barriers to obesity treatment. *Eur J Intern Med*. 2008;19(3):173–180.
39. Egger G, Swinburn B. An “ecological” approach to the obesity pandemic. *BMJ*. 1997;315(7106):477–480.
40. Blundell JE, Gillett A. Control of food intake in the obese. *Obes Res*. 2001;9(suppl 4):263S–270S.
41. Peters JC, Wyatt HR, Donahoo WT, Hill JO. From instinct to intellect: the challenge of maintaining healthy weight in the modern world. *Obes Rev*. 2002;3(2):69–74.
42. Swinburn B, Egger G. The runaway weight gain train: too many accelerators, not enough brakes. *BMJ*. 2004;329(7468):736–739.
43. Alvaro C, et al. Moving Canadian governmental policies beyond a focus on individual lifestyle: some insights from complexity and critical theories. *Health Promot Int*. 2011;26:91–99.
44. Kirk SF, Price SL, Penney TL, et al. Blame, shame, and lack of support a multilevel study on obesity management. *Qual Health Res*. 2014;24(6):790–800.