Lindo Bacon, PhD

March 6, 2022

To the Academy of Nutrition and Dietetics, in response to the public comment guideline review of Medical Nutrition Therapy Interventions for Adult Overweight and Obesity Treatment:

I am quite concerned about the proposed recommendations. These guidelines will not only be ineffective, but will introduce tremendous harm. The AND's credibility is at stake, as is the credibility of registered dietitian nutritionists and others who receive credentials issued by CDR.

Your analysis was flawed before it even began. While the methods applied in your Evidence Analysis are quite valuable in some circumstances, in this case it was the wrong review type to apply and led to faulty conclusions. You cannot get evidence-based guidelines from an EAL review if the interpretations of data it relies on do not meet the standards of evidence-based medicine.[1] [2]

Anjali Jain, at the time deputy physician editor of the British Medical Journal, conducted a systematic review of the weight loss literature.[3] In Jain's review, "Most studies were randomised controlled trials, systematic reviews of randomised controlled trials, or, when randomisation was not ethical or feasible, well controlled prospective studies." The review determined that "Although these were the best studies available according to the principles of evidence based medicine, many did not fulfil its requirements. For example, randomised trials often lacked details describing the randomisation and were seldom blinded. Participants were usually few in number, not well characterised at baseline, and rarely diverse (most were white, well educated women). Attrition rates were high, and intention-to-treat analysis was seldom conducted. Participants were generally not followed long enough to ensure that weight loss was permanent. These flaws bias the results and can exaggerate the effects. Systematic reviews noted the lack of high quality clinical trials."

All of these flaws – and more – are present in the investigations you evaluated.

Furthermore, you cannot get valuable information from an EAL review if the questions you are asking are based on unchallenged and untenable assumptions. Consider these:

Unproven Assumption: A high BMI is inherently unhealthy

While it is true that there are many diseases associated with a high BMI, much of that may be explained by confounding factors, not weight per se. For example, insulin resistance or other metabolic dysfunction may be the true driver of poor health, with high weight merely a side effect.[4] Higher incidence of dieting, weight cycling, and the weight stigma visited on people with higher weights are also confounding factors that could explain the association, as discussed below.

There is also evidence that a high BMI may be protective, as determined by a meta-analysis of 2.88 million people conducted by the U.S. Centers for Disease Control (CDC).[5] They found that hazard ratios for mortality were lowest in individuals BMIs categorized as "overweight" and that individuals with BMIs categorized as "grade I obesity" (i.e., BMI 30-35) had risk equivalent to individuals with a BMI deemed "normal weight" (BMI 18.5- 25).

Additionally, from an earlier review I co-authored: “There is a robust pattern in the epidemiological literature that has been named the "obesity paradox" [40, 41]: “obesity” is associated with longer survival in many diseases. For example, “obese” persons with type 2 diabetes [42], hypertension [43, 44], cardiovascular disease [41, 45], and chronic kidney disease [46] all have greater longevity than thinner people with these conditions [47–49]. Also, “obese” people who have had heart attacks, coronary bypass [50], angioplasty [51] or hemodialysis [52] live longer than thinner people with these histories [49]. In addition, “obese” senior citizens live longer than thinner senior citizens [53].” [6]

Unproven Assumption: “Obesity” = Disease

Furthermore, it is important to challenge the notion that “obesity” is a disease itself. Consider the origin of this notion: The American Medical Association convened an expert panel to examine the research. They concluded that correlations between “obesity” and morbidity and mortality rates did not establish causality and there was concern that medicalizing “obesity” would lead to further stigmatization and unnecessary treatment.[7] (It did.) Despite evidence-based direction not to (from their own scientific committee!), the AMA ruled to establish “obesity” as a disease.

Unproven Assumption: Weight Loss = Improved Health

Another example of an unproven assumption is that losing weight will lead to improved health. Every intervention study examining this assumption has confounders (including, of course, those in your analysis) since intervention participants are doing something, perhaps changing their eating or activity habits. As a result, improved outcomes of the interventions can’t provide evidence that it is the weight loss itself that causes the improvement. However, evidence to determine the impact of weight change is available: correlational analyses of diet interventions have found only minimal improvements in health outcomes and that none of these improvements correlated with weight change.[8] Other research indicates that weight loss, even if intentional, is not consistently associated with lower mortality risk.[9] [10]

In contrast, while the benefits of weight loss are unproven, it is well established that changes in health habits can improve health outcomes - even in the absence of weight loss.[11] [12]

Unproven Assumption: At Same BMI, Health of People who are Weight-Reduced = Health of People at Never-High BMI

Additionally, your questions assume that if a high-BMI individual loses weight, they will have similar health outcomes to someone with the same BMI who was never at a high-BMI. Again, this is an unproven assumption; substantial research and an understanding of basic physiology suggests the opposite to be true.[13] [14]

Conflict of Interest

I am also concerned about the conflict of interest (COI) that isn’t documented on COI statements or acknowledged by your organization. Your recommendations conclude that high BMI should be “fixed” and that dietitians are poised to help. At the same, most dietitians make a living off

prescribing weight loss, and their education, identity, reputation, and job expectations are shored up by their allegiance to weight management.

What concerns me is that this conflict of interest wasn't even recognized. That weight needs to be "managed" is such a strong assumption that apparently reviewers didn't even consider the notion that they (or the AND) may have a vested interest in endorsing these recommendations. Without this awareness, the reviewers couldn't control for their bias.

Given that there is lower prevalence of "obesity" among dietitians compared to the general population they serve, most are also benefiting from the weight stigma promoted in these guidelines. (Observe what happens when a fat dietitian and a slender dietitian with similar qualifications apply for a job to see this benefit, called "thin privilege," at work.[15])

It is also quite concerning that many dietetics students comment that their dietetics education changed their relationship to food: they thought about food more often, struggled to maintain their weight, and worried about their professional credibility if they gained weight.[16] Unsurprisingly, there are also higher rates of orthorexia nervosa in dietitians compared to the general population.[17] [18] [19] Qualitative analysis concludes that "self-alienation and disembodiment become necessary aspects of the journey through dietetic professionalization."[20] The dietetics field draws students who are preoccupied with thinness and their education cultivates that unhealthy preoccupation.

Lack of Efficacy

Weight management efforts clearly are not working. Numerous studies demonstrate a high prevalence of weight loss attempts over the past 40 years; in that same time frame, "obesity" prevalence has tripled.[21] Furthermore, a substantial number of studies demonstrate that diets rarely produce lasting weight loss[22] [23] [24] [25] and the biologic mechanisms that explain why sustained weight loss is illusory are well established.[26] [27] Dieters who manage to sustain weight loss are the rare exception, rather than the rule. Dieting also predicts "obesity" later in life[28] and several reviews also find that approximately one third to two thirds of dieters regain more weight than they lost on their diets.[29] [30]

In sum, for many people, your guidelines will not just fail to produce sustained weight loss, but will backfire.

Unsupported Assumption: "Treating Obesity" is Harmless

Your recommendations also rely on the unquestioned assumption that "treating obesity" is harmless. This is not the case. Body discontent, weight cycling, weight stigma,[31] and eating disorders are among the unmeasured outcomes of the recommendations you suggest:

- Body weight dissatisfaction is rampant in all BMI classes and is associated with many aspects of poorer health.[32] [33] [34] One study compared people of similar age, gender, education level, and rates of diabetes and hypertension, and examined how often they reported feeling sick over a 30-day period.[35] Results indicated that body image had a much bigger impact on health than body size. In other words, two equally fat women

would have very different health outcomes, depending on how they felt about their bodies. Likewise, two women with similar body insecurities would have similar health outcomes, even if one were fat and the other thin. In other words, the difference between actual and desired body weight was a stronger predictor than was BMI of mental and physical health. These results suggest that the body dissatisfaction associated with being fat is a greater contributor to obesity-associated disease than weight itself.

- Diets frequently result in weight cycling, the repeated loss and regain of weight, which on its own leads to health problems, contributing to higher mortality as well as higher morbidity.[36] [37]

- Promoting the idea that weight is problematic and something to be fixed is weight stigma. It doesn't matter if you make these arguments in a kinder gentler way or because you care about the individual's health. So are the unproven notions that weight is under individual control via willpower and that fatness is due to poor lifestyle habits. Weight stigma can trigger physiological and behavioral changes linked to poor metabolic health.[38] [39] [40] [41] [42] [43] One important study found that people who have experienced higher levels of weight stigma have more than twice the risk of high allostatic load, a measure of cumulative stress, independent of BMI.[44] (Higher allostatic load drives risk for type 2 diabetes, cardiovascular disease, mortality, and more.) This study also found weight stigma to be a greater risk factor than what people ate. Another study determined that the experience of weight stigma is associated with greater disordered eating, increased comfort eating, sleep disturbance, and alcohol use.[45] Also notable, BMI and health are only weakly related in cultures where obesity is not stigmatized, such as in the South Pacific.[46] [47]

  These studies indicate that weight stigma is more health-damaging than weight itself. Many studies indicate high levels of weight bias among dietitians.[48] [49] [50] [51]

- Eating disorders often begin with dieting[52] [53] and given the AND's support of these values, it's not surprising there is also high prevalence of eating disorders among dietitians.[54] [55] [56] [57]

Ironically, all of these factors are also associated with weight gain. Some scientists hypothesize that the chronic stress elicited by these factors - by increasing an individual's allostatic load - contributes to a raised bodyweight setpoint.[58]

In all the research that blames fat for ill health, have you ever seen a study that controls for body dissatisfaction, weight stigma or weight cycling—and the stress those put on the body? I haven't.

Racism

I'd also like to draw attention to the observation made by Dr. Jain: the research participants in most weight loss intervention studies are "rarely diverse (most were white, well educated women)." Your analysis did not mention this, nor control for it. Ethical scientific reporting

dictates naming this weakness, as well as addressing why you believe outcomes are applicable to a population not evaluated. As high BMI is more common among marginalized groups,[59] this is an egregious error likely to worsen racial and socioeconomic disparities. The irony goes further when you consider that anti-fatness has its roots in anti-Blackness,[60] which your research is reproducing and supporting.

As Lucy Aphramor and I write in *Body Respect*, "It's no longer good enough to do the same thing harder and hope that this time you'll get a different outcome. Instead, it's time to get real and face the fact that you are doing harm. Even if you cling to your belief that being fat is the dire threat you portray it as being, all that drama clearly isn't helping anyone to lose weight or get healthy. Meanwhile, the fear of fatness and the stigma that goes with it hurts us all, fat or thin."[61]

Given the inefficacy of weight management interventions and the considerable harms, a continued focus on weight is unethical.[62] As Amee Severson and I write in Scientific American, "When the focus is on weight and body size, it's not "obesity" that damages people. It's fearmongering about their bodies that puts them at risk for diabetes, heart disease, discrimination, bullying, eating disorders, sedentariness, lifelong discomfort in their bodies, and even early death."[63]

We're in the midst of a paradigm shift where many people are recognizing that common assumptions about weight are not accurate and have led to misinterpretations of data, causing widespread pain and frustration. This includes scientists gathering data, health care professionals observing their clients, policy makers noting their ineffectiveness, and the lay public bearing the burden.

Misappropriation of HAES

I also want to specifically address the inappropriateness of your recommendation not to use a Health at Every Size® approach.[64] HAES intervention should not have been included in your analysis. Even a cursory examination of HAES principles indicates that a HAES approach does not fall under the rubric of weight management.[65]

Your evaluation of a HAES approach is seriously flawed in other ways too. As you note, there are few or no studies evaluating a Health at Every Size intervention provided by a dietitian. Of course this is true. The AND's position on weight management ensures this is the case. Dietitians are formally educated into your weight-focused paradigm; they are not required to learn about HAES; recommendations like these discourage learning about HAES; and many have never been exposed to HAES.

Fortunately, there are many renegade RDNs who have stepped away from AND's weight management recommendations and advocate for HAES.[66] [67] In contrast to the weight bias that results from a dietetics education, there is evidence that teaching HAES principles to nutrition students can help improve attitudes toward weight.[68] [69] [70] There is also a large body of literature documenting that a HAES approach can improve health, and, unlike your weight-based paradigm, no investigations suggesting it harms.[71] [72] [73] [74] [75] [76] [77] [78] [79] [80] Having conducted a

randomized controlled study myself, I know that a HAES approach is also transformative in a way that can't be captured quantitively.

Your approach to combatting "obesity" and poor metabolic health is clearly not working. Many of the diseases blamed on obesity may instead be a result of recommendations like those you propose.

Ignorance about what I write here is no longer an excuse.

What I read into these recommendations is that you are gatekeepers desperately trying to protect an old and dying paradigm. I suggest it is in the AND's best interests to disregard these recommendations and advance along with the science.

The most effective, ethical and evidence-based approach to achieve your goal of improving the health and well-being of fat people is to address the behaviors and attitudes of the individuals and institutions that do the stigmatizing, rather than those of the targets of mistreatment.

In other words, if you really want to address the true problem affecting fat people, get your house in order. Consider obtaining the services of HAES dietitians.

Sincerely,

Lindo Bacon, PhD

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[66] Visit https://haescommunity.org/search/ and conduct a search for dietitians..

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