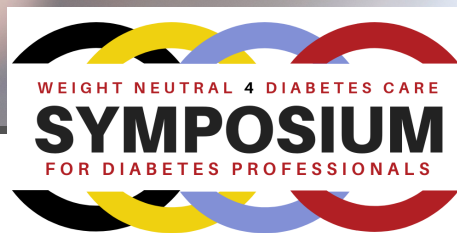
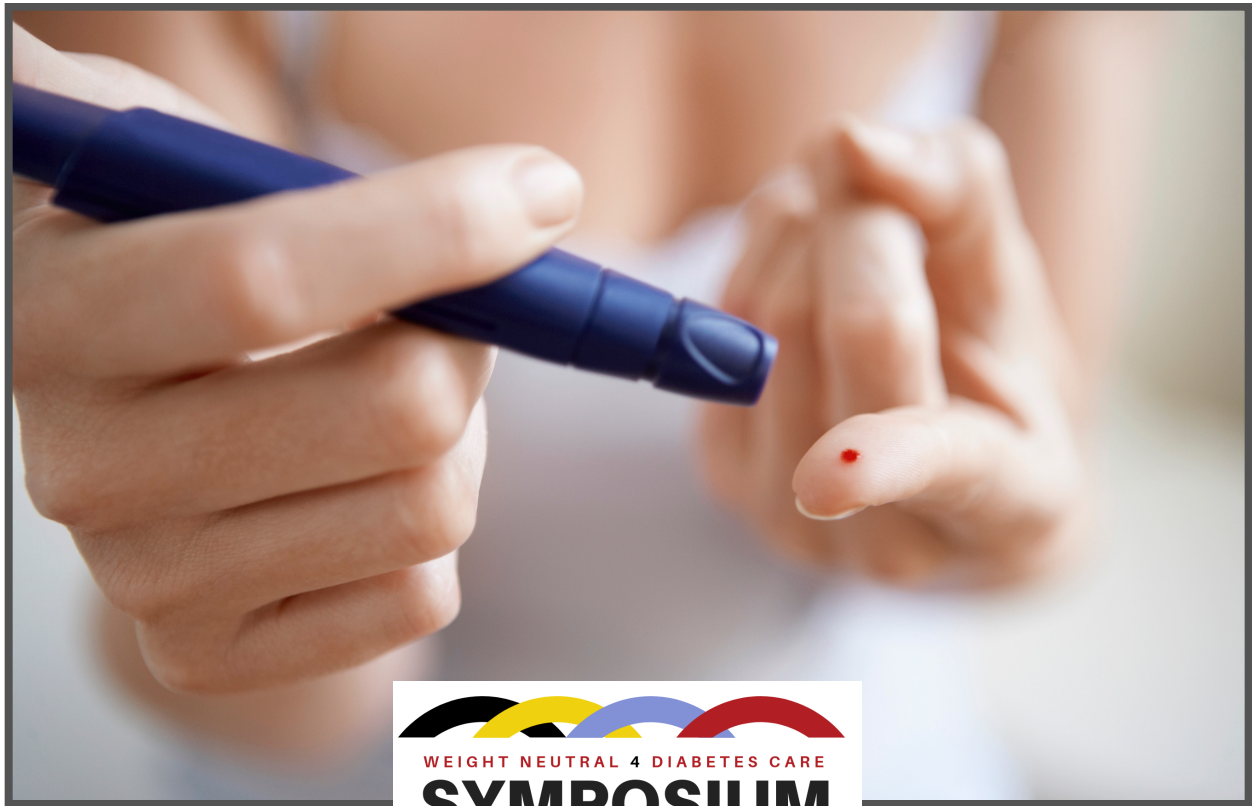


# Why A Weight-Neutral Approach is Essential in Diabetes Care



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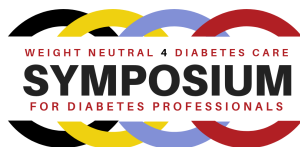
# Why A Weight-Neutral Approach is Essential in Diabetes Care

It is a delight to have an opportunity to explain how research shows that pursuing weight loss is not sustainable and why a weight-neutral approach is essential to diabetes care.

We recognize weight-stigma, weight-bias, *Health at Every Size*, and disordered eating are complex issues that are interwoven into this discussion. We also recognize these issues may not be your expertise. There is a natural learning trajectory which involves multiple steps, wherein the first step is reviewing the evidence. We are taking this opportunity to explain significant research supporting the statement that sustainable weight loss is not possible for a significant majority of people. In addition, we have unpacked the larger issues surrounding weight loss by providing the information in a question and answer format to support your learning. We hope it is helpful toward expanding your understanding. We urge all health care providers to move toward providing weight-neutral care.

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Founders of WN4DC Symposium



# Why A Weight Neutral Approach Is Essential in Diabetes Care

## ***Can Body Mass Index (BMI) be a proxy for health?***

**No.** The formula now known as “Body Mass Index (BMI)” was created around 1850 to draw conclusions about populations, not individuals. It was not designed to understand the role of fat or associated health risks. In 1972, Dr. Ancel Keys appropriated the formula as a proxy for body-fat percentage and renamed it the Body Mass Index, BMI.<sup>1</sup>



Photo by i yunmai on Unsplash

## ***Is there harm when we use BMI as a screening tool?***

**Yes.** When BMI is used as a proxy for health, 75 million U.S. adults are misclassified. When comparing their BMI to cardiometabolic data (blood pressure, triglyceride levels, C-Reactive protein, and glucose levels), nearly half the people in the “overweight” category were cardiometabolically healthy. Almost a third of those in the “obese” categories were healthy, and nearly a third of people in the “healthy weight” category were not healthy!<sup>2</sup>

This misclassification is fueling misinformation and erroneously associating health with weight. When weight is separated from behaviors, it is possible to see that having lower body weight (BMI) is only protective if an individual fails to engage in healthy habits. Matheson (2012) showed that when Individuals with a BMI >30 participate in one habit, the hazard ratio drops >3 points. The reduction in the hazard ratio continues to decline as more behaviors are included, and it equalizes when a person participates in four identified health habits, regardless of weight changes.<sup>3</sup> This research provides more evidence that behaviors, not weight, create health.

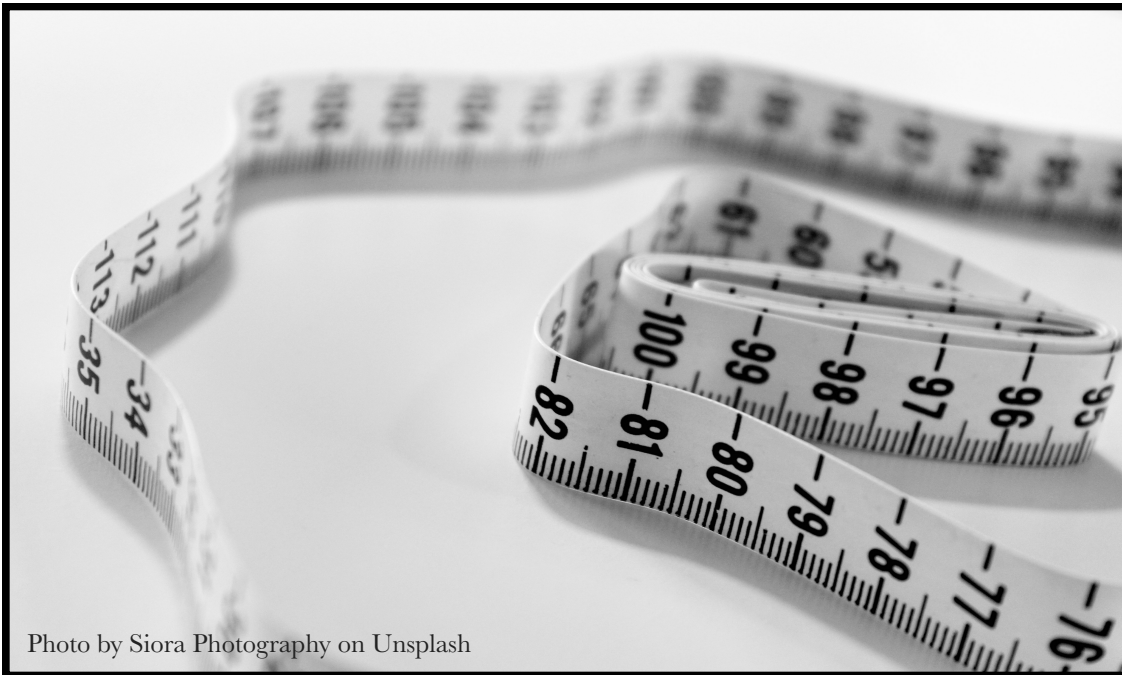


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***Is there research that shows maintaining a 10% weight loss is possible for five or more years?***

**No.** There is no evidence showing that it is possible to maintain weight-loss. In 2007, a review of 31 long-term studies on dieting found that the majority of individuals were unable to maintain weight loss over the long-term. In fact, up to two-thirds of dieters regain more weight than they lost. The authors concluded that “...there is little support for the notion that diets lead to lasting weight loss or health benefits.”<sup>4</sup> Since 2007, two large clinical trials, “The Look AHEAD Trial” and “Diabetes Prevention Program Outcomes Study,” were completed. These are specific to diabetes care. Their results confirm that significant weight loss, greater than or equal to ten percent for five or more years, is not possible.

The Look AHEAD trial examined more than 5,000 “overweight” or “obese” participants who were diagnosed with type 2 diabetes. The participants were randomized to either usual care (diabetes

support and education (DSE)) or Intensive Lifestyle Intervention (ILI). ILI consisted of consuming between 1,200-1,800 calories per day, meal replacement supplements, >175 minutes per week of moderate activity, and 72 contacts over five years. The ILI group, was able to achieve a weight loss of 8.6% in one year, which is less than 10%. The study, which was stopped early because there is no evidence that weight loss impacts heart disease, showed the ILI group had an average weight loss of 4.7%. When compared with the DSE group, who achieved a 3.5% weight loss, it was found there was a 1.2% difference between the groups. This limited change is more evidence that weight loss is not sustainable.

The Diabetes Prevention Program initial findings impressed the world, but in follow-up studies, it also demonstrated that long-term weight loss is not possible. In this study, the participants in the lifestyle arm of the DPP lost 7 kg during the first year. However, this weight was not maintained. An average weight loss, at year 10, was 2 kg or 4.4 pounds.<sup>5</sup>

Interestingly, the Metformin group had lost 2.5 kg during the DPP and this was maintained to year ten, which may indicate that individuals with diabetes are metabolically different than individuals without diabetes. Therefore, focusing on weight loss vs. disease management, as Franz, et al. explains, is ill-advised.<sup>6</sup> It is important to note that, from the original DPP study, the authors state it "... was not designed to test the relative contributions of dietary changes, increased physical activity, and weight loss to the reduction in the risk of diabetes."<sup>7</sup>



### ***Do lifestyle and diet impact A1C?***

**Yes, but lifestyle and diet don't replace medical treatment.** The impact of diet and lifestyle change on the A1C is limited. In the Look AHEAD trial the ILI group did show a marked decrease in A1C in the initial year, but this number increased through the follow-up period reminding all health care professionals that diabetes is a progressive disease that requires medical management in conjunction with a healthy lifestyle.<sup>8</sup> Shifting the focus from weight loss

to behaviors, specifically. Adequate nutrition, physical activity, social contact, and regular medical care is the goal of diabetes self-management as demonstrated by the AADE 7 Self-care Behaviors. Research that focuses on diabetes self-care, and not weight, is needed to explain the improvements in lipids, blood pressure, sleep apnea, renal disease, fitness, and depression that was seen in the Look AHEAD trial. Weight-neutral professionals argue that these improvements were related to the increase in behaviors because participants were unable to maintain weight loss.<sup>9</sup>

***Is there harm in promoting weight loss in diabetes care?***

**Yes.** The typical messaging surrounding diabetes is goal based, or outcome focused. We tell patients things like “lose weight” or “lose 10% of your current body weight.” Unfortunately, this messaging erroneously associates weight loss with curing or treating diabetes. This unintentional association is popularized in the media, with books, websites, news articles, and health campaigns to “prevent, beat, defeat diabetes” instead of focusing on the day-to-day support needed to manage diabetes. It is easy to emphasize weight-based outcomes, which only reinforce the fallacious notion that weight loss is a behavior. The level of harm that is associated with promoting weight loss is far more complex than avoiding treatment, and it is woven into the research of weight-stigma, weight-bias, and the impact of disordered eating, which were addressed in separate questions.

This is an image from the *WN4DC Professionals* Facebook group, taken on May 28, 2019, where a member posted about a client delaying care because he thought eating “better” would cure diabetes.



***Can a weight-centered approach promote or trigger disordered eating?***

**Yes.** The current weight-centered approach to diabetes care pays little attention to an individual’s dieting history, past diagnosis of disordered eating, or the risks dieting has on the potential development of disordered eating. The National Eating Disorder Association cites that in the USA, up to 30 million people suffer from an eating disorder, such as anorexia nervosa,

bulimia nervosa, or binge eating. This number is similar to the 2015 Centers for Disease Control and Prevention (CDC) findings that 30.3 million Americans have diabetes.<sup>10</sup>

Like diabetes, much of disordered eating goes unrecognized and untreated. Only one in ten people with eating disorders will receive treatment.<sup>11</sup> Yet, the overlap of these two conditions is shockingly high. According to research, “Disordered eating behaviors may affect up to 40% of patients with type 2 diabetes mellitus.”<sup>12</sup>

It is tempting to dismiss this statistic and assume you can look at a person and recognize an eating disorder. However, eating disorders affect people of all sizes and they remain, in large part, invisible. At present, there isn't a validated English language disordered eating screening tool specific for people with diabetes.

The vast majority of people with eating disorders do not live in "underweight" bodies and never receive a diagnosis or treatment for their eating disorder. This is due, in part, to weight stigma.



### ***Is weight stigma impacting diabetes outcomes?***

**Yes.** Weight stigma or weight-based discrimination, is, “The social devaluation and denigration of people perceived to carry excess weight, [which] lead to prejudice, negative stereotyping and

“It is essential to state that disordered eating can't promote euglycemia and is harming both physically and mentally.”



discrimination toward those people.”<sup>13</sup> It can include, “A broad range of experiences from minor, everyday instances of differential treatment, or ‘microaggressions’ (e.g., being treated with less respect than others in subtle ways), to being treated unjustly in specific contexts (e.g., being denied employment).”<sup>14</sup>

Weight stigma is a significant factor because research shows in medical settings; it is linked to the avoidance of medical care.<sup>15</sup>

Experiencing weight stigma can lead to a host of behaviors that can negatively impact glucose management. These include

increased eating and decreased

self-regulation, higher cortisol levels, avoidance of exercise, and a greater likelihood of experiencing anxiety disorders.<sup>16 17</sup> People who experience weight stigma have also been found to have a 60% increased risk of death, independent of BMI.<sup>18</sup> The cause of this startling statistic is not due to a single variable, but rather a complex interaction with misdiagnosis and misattribution of symptoms based on weight and a higher likelihood of being prescribed weight management instead of necessary interventions for actual health conditions. These experiences create a lower likelihood of a patient following provider recommendations and can foster the desire to delay care or minimize symptoms which result in worse health outcomes and disease progression.

Prescribing weight loss creates the perfect storm for an individual who has been diagnosed with diabetes to trigger or justify the use of disordered eating patterns to treat or manage their diabetes. **It is essential to state that disordered eating can't promote euglycemia and is harming both physically and mentally.** Disordered eating patterns are unsustainable, creating a cycle of failed attempts that prompts an individual to engage in more and more extreme behaviors. This results in the development of chronic dieting, weight-cycling, eating disorders,



including binge eating disorder that is associated with depression, substance abuse, and self-harm.

***Does provider language impact diabetes care?***

**Yes.** The joint position paper from AADE and ADA regarding language has, as it's guiding principle, "Every member of the healthcare team can serve people with diabetes more effectively through a respectful, inclusive, and person-centered approach. Also, "Stigma, that has historically been attached to a diagnosis of diabetes, can contribute to stress and feelings of shame and judgement".<sup>19</sup> This statement paper recognizes the impact language has on an individual with diabetes and this affect includes weight-based labeling such as "obese." The terms used to describe a fat person are shifting. We recognize this requires each health care professional to talk with their clients about preferred body descriptors to avoid pathologizing language for higher weight individuals receiving care.

***Do the effects of weight stigma and social isolation impact diabetes?***

**Yes.** A 2019 study looking at social relationships states:

"...women in the highest social support quartile had lower risk of diabetes after adjusting for demographic factors, health behaviors, and depressive symptoms (hazard ratio [HR] = 0.93, 95% confidence interval [CI] = 0.89–0.97). Social strain (HR = 1.09, 95% CI = 1.04–1.13) and stressful life events (HR = 1.10, 95% CI = 1.05–1.15) were associated with higher diabetes risks. The association between diabetes and social strain was stronger among African American women. Social relationship variables had direct relationships to diabetes, as well as indirect effects partially mediated by lifestyle and depressive symptoms."

The authors concluded, "Social support, social strain, and stressful life events were associated with diabetes risk among postmenopausal women independently of demographic factors and health behaviors. In addition to healthy behaviors such as diet and physical activity, healthy social relationships among older women may be important in the prevention of diabetes."<sup>20</sup>

***Does weight loss decrease the risk of mortality?***

**No.** Research supporting this statement includes a review and meta-analysis of the effect of weight loss on all-cause mortality risks by Harrington, who stated: "In conclusion, the available

evidence doesn't support solely advising overweight or obese individuals who are otherwise healthy to lose weight as a means of prolonging life."<sup>21</sup> A commonly referenced study, Mokdad (2004), claimed to prove that "obesity is the second leading cause of preventable death."<sup>22</sup> However, this statement is blatantly problematic as it was co-authored by the CDC director just days before the CDC requested Congressional funding. To the contrary, Flegal, et al., published evidence in 2013, concluding "Grade 1 obesity overall was not associated with higher mortality, and overweight was associated with significantly lower all-cause mortality."<sup>23</sup>

***Can a weight-neutral approach to diabetes care help with these problems?***

**Yes.** Shifting the focus from weight-centered to a weight-neutral approach can avoid these harmful outcomes. **Healthcare providers should think of weight-neutral care as a type of universal precaution to stop perpetuating disordered eating, weight cycling, and weight stigma, while improving overall well-being.** Weight-neutral care takes the emphasis off weight loss, which, as shown, is scientifically unproven and, instead, prescribes evidence-based interventions which promote health and well-being regardless of weight change.

**“Healthcare providers should think of weight-neutral care as a type of universal precaution to stop perpetuating disordered eating, weight cycling, and weight stigma, while improving overall well-being.”**

A weight-neutral provider avoids triggering language and works to become aware of weight bias and weight stigma. Weight-neutral science separates health behaviors from outcomes and is designed to identify confounding variables, including weight stigma, weight bias, social determinants of health, and social isolation and how these are impacting outcomes.

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