

## The National Weight Control Registry: A Critique

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### ABSTRACT

This article is a critique of the claim that the National Weight Control Registry provides data showing that a significant number of adults in the United States have achieved permanent weight loss. We believe that promoting calorie-restricted dieting for the purpose of weight loss is misleading and futile. We advocate the adoption of a health-at-every-size (HAES) approach to weight management, focusing on the achievement and maintenance of lifestyle changes that improve metabolic indicators of health.

**KEY WORDS:** weight, dieting, weight loss, healthy weight

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Can people reliably and predictably lose weight and keep it off long term? The answer is a resounding “yes” if one listens to spokespersons for the National Weight Control Registry (NWCR). The personal stories of people enrolled in the reg-

istry have been featured on television talk shows, in major newspaper and magazine articles, on Web sites, and at various meetings on obesity. Researchers affiliated with the NWCR have said that “part of the reasons for developing the NWCR was to counter the belief that no one succeeds at long-term weight loss. We believe that subjects in the NWCR show that you can achieve and maintain substantial amounts of weight loss.”<sup>1</sup> The Web site where one enrolls in the registry states, “One of the most popular myths about weight loss is that everyone who loses weight will eventually gain it back. The NWCR is a research study which has exploded this myth and shown that successful weight loss is indeed possible.”<sup>2</sup>

Obesity experts, dietitians, doctors, and allied health professionals point to the NWCR as proof that people can lose weight and keep it off. They believe that the weight loss registry has data contradicting the fact that 95% of people who lose weight regain it within 3 to 5 years. However, a review of publications about NWCR enrollees does not support greater optimism about the human potential for successful long-term weight loss.

There is no doubt that the weight loss registry has identified individuals who have been successful in losing weight permanently. The personal stories of these individuals demonstrate the extraordinary changes they have made in their eating and activity patterns. For example, one woman became a dance-exercise instructor and reported that she often spends 6 hours a day leading classes. Another runs a full hour every day without fail. At least one participant lost weight as a result of worsening diabetes. Permanent weight loss may be achievable if a person is willing to totally restructure behavior patterns in relation to food and activity. These individuals represent the 5% of people who try to lose

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Written by those who believe in “Health At Every Size,” a nondieting approach to weight management that emphasizes improvements in metabolic indicators of health through the adoption of more healthful eating and activity patterns.

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weight and succeed in both the short and the long term. However, the vast majority of people, 95%, are not going to be successful at long-term weight loss. Data from the NWCR do not prove otherwise. They do not counter pessimism regarding long-term weight loss success. This is something that most obesity researchers and health professionals do not recognize.

The NWCR Web site at the University of Colorado states that it was founded in 1993 and is a collaborative venture among researchers at the University of Colorado, Brown University, and the University of Pittsburgh. The NWCR is described as “a longitudinal prospective study of individuals 18 years and older, who have successfully maintained a *30-pound weight loss for a minimum of 1 year* [italics added].”<sup>3</sup> Data on subjects enrolled in the NWCR are self-reported. Most of the data are collected through mailed questionnaires. Also of concern is the fact that 80% of enrollees are female and 96% are white; in other words, the subjects are not representative of the US population.<sup>4</sup> Despite increasing worldwide publicity, the number of enrollees has remained at about 4000 for a number of years.

According to a 2003 article entitled “Recovery from Relapse Among Successful Weight Maintainers,” NWCR researchers examined weight changes among 2400 persons from the time they first enrolled in the registry (ie, baseline) until 2 years after enrollment.<sup>4</sup> The results show that 72% of participants were above their baseline weight when reassessed at year 2 ( $n = 1630$ ). However, the researchers counter this finding with the notion that 96.4% of the sample was still well below their self-reported maximum lifetime weight. And they state, “These findings should not overshadow the overall success of the participants in this sample.” This raises the questions of whether people who have regained weight over a 2-year period are accurately reporting their weight loss and if they should be labeled as successful when they are in the process of regaining weight. Also of concern is the fact that although 3234 registrants were eligible to participate in this study, having been enrolled in the NWCR for 2 years or more, only 2492 (77%) responded. A significant number of subjects, 23% ( $n = 742$ ), did not return the questionnaire that was sent to them.

Most obesity experts consider 5 years as the “gold standard,” that is, someone who has lost weight and kept it off for 5 years should be considered “cured.” According to a 1997 article, 629 women and 155 men (784 in total) enrolled in the NWCR had lost an average of 30 kg and maintained a required minimum weight loss of 13.6 kg for 5 years.<sup>5</sup> However, in their 2003 article, only 465 subjects did not regain any weight from baseline to year 2.<sup>4</sup> There is no mention of what happened to the missing 319 subjects who were labeled as “individuals successful at long-term maintenance of substantial weight loss” in the 1997 publication. Finally, the researchers have not published any follow-up data on the 784 subjects enrolled in the NWCR since 1997.

There is also inconsistency in the standards used to include subjects in studies of NWCR enrollees. An article

published in 2000 entitled “Does Weight Loss Maintenance Become Easier Over Time?” included 758 enrollees who had maintained at least a 15 kg weight loss for 2 years or longer.<sup>6</sup> An article published in 2003 entitled “Promoting Long-Term Weight Loss: Does Dieting Consistency Matter?” included 1429 subjects who had lost 15 kg or more for 1 year or longer.<sup>7</sup>

Finally, using conservative estimates of the prevalence of dieting for weight loss in the United States, it appears that 44% of women and 29% of men are dieting at any one point in time.<sup>8</sup> The US census current population estimates for men and women over the age of 18 years are 100 994 000 and 108 133 000, respectively.<sup>9</sup> Using these figures, it appears that there are 76 800 000 people dieting. If 5% of them are successful at permanent weight loss, approximately 3 800 000 people will be eligible for enrollment in the NWCR. According to the NWCR Web site, there are currently 4000 people enrolled.<sup>3</sup> So the researchers can demonstrate a “success rate” of 0.001%, which is not even close to the dismal 5% estimate cited in the scientific literature. To demonstrate a 5% success rate, the NWCR would have to enroll an additional 3 797 000 successful dieters!

After reviewing all of the articles published on subjects in the NWCR, it is our conclusion that published data from the NWCR support continued pessimism about the potential success of permanent weight loss for the majority of overweight and obese individuals. Although some people do succeed at permanently losing weight, they are the anomalies. Representing them as “typical” and holding them up as models for others under the guise of “if they can do it, you can do it” is misleading and gives people a false sense of optimism about their potential for losing weight permanently. It also deludes health professionals into believing that permanent weight loss is a realistic and achievable goal for many of their patients. These kinds of statistics do not begin to explode myths about the human potential for long-term weight loss.

If weight loss is abandoned as a goal for “obese” individuals, what should take its place? Those associated with the Weight Realities Division of the Society for Nutrition Education and the Association for Size Diversity and Health are advocates of an approach to weight management referred to as Health At Every Size (HAES), which is based on research demonstrating that large people can improve their metabolic fitness and reduce their chronic disease risk by improving the nutrient density of their diet and increasing their physical activity. We recognize that health and well-being are multidimensional and include physical, social, spiritual, occupational, emotional, and intellectual aspects. We believe in promoting all aspects of health and well-being for people of all sizes. In particular, we advocate eating in a manner that balances individual nutritional needs with hunger, satiety, appetite, and pleasure. We also enthusiastically support individually appropriate, enjoyable, life-enhancing physical activity rather than exercise for the purpose of weight loss. Needless to say, there will always be people

who manage to lose weight permanently. However, they are the exception rather than the rule. As Jeffrey Friedman has so eloquently pointed out, "In trying to lose weight, the obese are fighting a difficult battle. It is a battle against biology, a battle that only the intrepid take on and one in which only a few prevail."<sup>10</sup>

### **IMPLICATIONS FOR RESEARCH, PRACTICE, AND POLICY MAKING**

In summary, the NWCR located 3000 of 76 million Americans currently trying to lose weight. Even in this elite group, 72% are steadily regaining weight. Far from showing that permanent weight loss is commonplace, the NWCR shows that the odds are against dieters in the weight loss lottery.

We challenge health professionals to stop focusing on weight loss as if it were a realistic and achievable goal when they know it is neither. It is time to be truthful and inform people about the actual odds of losing weight permanently. Then we can move on to the real task at hand: helping people of all sizes and shapes live more healthful lives.

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