

## VIEWPOINT

# Counting Calories as an Approach to Achieve Weight Control

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The increasing prevalence of overweight and obesity in the United States has been well documented.<sup>1</sup> Although there are many reasons for this increase, one important factor is the change in eating habits over the past several decades. For instance, many people frequently eat meals and snacks purchased from fast food restaurants, which often provide foods that contain high amounts of calories, fat, and sodium. For decades there have been numerous recommendations for weight loss involving specific diets, special foods, exercise programs, medications, and surgery. All of these have been shown to promote weight loss. The various well-known diets all result in similar amounts of weight loss but only if the individual adheres to the diet, resulting in fewer calories ingested.<sup>2</sup>

The challenge, however, is to find a way to convince patients to consume fewer calories. Successful long-term calorie reduction is most likely to result when patients decide for themselves which dietary changes to make and when. Essential to any effort is a clear understanding that dietary change is a slow process that requires ongoing vigilance. This is not a popular concept in a world now accustomed to immediate results.

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Counseling patients about weight loss is a challenge for physicians. The process takes time, a rare commodity during an office visit. Ancillary staff can provide much of the detailed information, but many patients need to hear the information directly from a trusted physician. Many physicians perceive that weight loss counseling cannot be reimbursed, but Medicare now allows for up to 20 specific weight loss counseling visits in a year.<sup>3</sup> However, few clinicians have taken advantage of this (based on billing codes).<sup>4</sup>

Individuals often choose trendy, nationally advertised diets when seeking to lose weight. This approach generally fails because many of these diets encourage unnatural eating habits that cannot be sustained. It is better for physicians to advise patients to assess and then modify their current eating habits and then reduce their caloric ingestion by counting calories. Counseling patients to do this involves provision of simple handouts detailing the calorie content of common foods, suggested meal plan options, an explanation of a nutrition label, and a list of websites with more detailed information. Patients should be advised that eating about 3500 calories a week in excess of the amount of calories ex-

pendent results in gaining 1 lb (0.45 kg) of body weight. If a patient reduces caloric ingestion by 500 calories per day for 7 days, she or he would lose about 1 lb of body weight per week, depending on a number of other factors. This is a reasonable and realistic place to start because this approach is easily understood and does not ask a patient to radically change behavior. Examples of sources of 400 to 500 calories that could be avoided include 2 doughnuts, 2 cups of rice, and 40 oz of regular soda.

Once patients understand the need to reduce their daily caloric intake by a modest amount, they should be educated regarding how to proceed. Learning their actual daily caloric intake surprises most people. Pointing out hidden calories—such as various condiments, oils, and butter—will often illuminate the problem. Teaching patients to read nutrition labels is essential for their long-term success at weight control.

While this is a simple arithmetic exercise, many patients find it overwhelming. Online calorie counting programs can be helpful because many have restaurant menus listed and patients can add in their commonly prepared meals. Patients need to be cautioned to read the nutrition label rather than the advertising on the packaging. Foods labeled as “low fat” or “low carbohydrate” may mislead patients to perceive those foods as representing healthy weight-loss options, but this may not be the case. These foods do not necessarily have fewer total calories than the original version of the food. For example, a low-fat food may have a great deal of sugar to compensate for the loss in taste resulting from removal of fat. Fruit juice may be fat free but it is not a low-calorie food because it contains large amounts of sugar.

Once patients understand the composition of a given complex food, it is easier for them to understand why it may not be the healthiest choice. This concept is conveyed in the illustrated cover of this issue of *JAMA*. A beef patty has definite food value but after adding a large bun, dressing, and extra cheese, the total calories (535) will far exceed the caloric content of the meat, pickle, and tomato (240).

The Table is a partial illustration of what a food/calorie handout might look like. For example, clinicians can point out how many calories are in the handfuls of nuts some patients consume, or that using butter, margarine, or mayonnaise adds far more calories than mustard on a sandwich. Eating 1 rather than 2 doughnuts in the morning, using zero-calorie spray when cooking, drinking a diet soda (or water) rather than regular soda, and using mustard rather than mayonnaise on

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Table. Examples of the Caloric Content of Selected Foods<sup>a</sup>

Product	Serving Size	Calories
Kirkland mixed nuts	1 oz (1/4 cup)	180
	40-oz jar	7200
365 Sea Salt Rippled Potato chips	1 oz (28) or 15 chips	150
	20-oz bag	3000
Kraft 1000 Island dressing	2 Tbsp	110
Oak Hill Farms Vidalia Onion Vinaigrette	2 Tbsp	110
Hellmann's Mayonnaise	1 Tbsp	90
Land O'Lakes whipped butter (tub)	1 Tbsp	50
Fleischmann's unsalted margarine	1 Tbsp	80
365 salted butter (stick)	1 Tbsp	100
Kirkland Organic Extra Virgin Olive Oil	1 Tbsp	125
Roundy's peanut oil	1 Tbsp	120
Wesson Canola Oil	1 Tbsp	120
Bush's Vegetarian Baked Beans	1/2 Cup	130
Tropicana Grovestand Orange Juice	8 oz	110
Trader Joe's Honey Crisp Apple Cider	8 oz	120
Gatorade Orange	12 oz	80
Coca-Cola	12 oz	140
Dunkin' Donuts	Glazed	260
	Éclair	380

<sup>a</sup> All data from nutrition labels on product or manufacturer website.

a sandwich would save the recommended 500 calories, without changing anything else in a patient's diet.

Although counting calories is ideal, this may not be practical for many patients. Many individuals may consider this task to be too difficult, time-consuming, or stigmatizing, whereas others may indicate that they simply cannot afford the healthier choices. Fresh fruits and vegetables require time for food preparation and are more likely to spoil than processed, packaged foods. Patients with busy lifestyles may find it difficult to cook their meals. Many people of lower socioeconomic status live in neighborhoods with little access to fresh foods, but they may have access to numerous fast food or convenience store options instead. Other busy households have opted to forgo the family dinner and instead eat in the car while traveling between activities, with meals often purchased from drive-through restaurants.

Eating habits, both learned and imposed, affect an individual's relationship with food over the long term. Nature, however, as well as the environment, does play a role. Puzifferri and colleagues<sup>5</sup> studied 30 obese patients and found an addiction-like response to food, in that the brains of obese and normal-weight individuals responded differently when they viewed photographs of high-calorie vs healthy food options. This suggests that weight loss efforts need to be managed as an ongoing issue, with expected setbacks and repeated efforts as well as ongoing diligence to maintain long-term success. Despite the similarities, thinking of obesity and overeating as another type of addiction creates a new problem: in addiction counseling patients usually are told that they must completely give up the addictive element (eg, alcohol, cocaine, gambling). No one can give up eating. It is an issue that must be confronted several times a day. This is perhaps why the mindfulness model—which is characterized by an individual attending to moment-by-moment experiences, thoughts, and emotions—has been applied to weight loss efforts.<sup>6</sup> It encourages giving the patient control over food choices and eating in general.

Medications and surgery provide similar benefits for patients. These interventions make it easier to follow a dietary plan. Without the commitment to long-term healthier eating, there will be no lasting success. Reliance on medications as a long-term solution also exacerbates the argument that it's "too expensive" to eat healthfully. Patients might be better served using their resources to buy healthier foods rather than general appetite suppressants. If a patient is unwilling to make appropriate changes in food choices, it is unlikely that he or she will have sustained success after a bariatric procedure. The dilemma is determining which patients will benefit from the more aggressive options (medication and surgery) and who should be advised to pursue diet and exercise alone.

There is no simple solution to the current obesity epidemic. Physicians can make use of available tools (online resources, dietitians, handouts) to educate their patients and raise awareness of total and healthy dietary intake. Perhaps the simplest advice comes from Pollan,<sup>7</sup> who suggests "Eat food. Not too much. Mostly plants." A slow steady weight loss implies that a patient has made sustainable changes in his or her diet. How each individual can be encouraged to reach this point, through awareness of intake and food choices, and with appropriate assistance (coaching, medication, surgery) as indicated, remains an important clinical challenge.

#### ARTICLE INFORMATION

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