



Counseling Patients on Weight and Health

The Challenge: Weight is a complex and sensitive issue. Clinicians find conversations about weight to be challenging. Patients have many factors at play including feelings of failure, shame, and concerns about being judged by health care providers.

Many patients want and even expect weight loss guidance from health care providers. Patients seek a trusting relationship with their providers, and many choose providers whom they believe have the confidence to raise difficult issues like obesity.ⁱ In one survey, 85% of patients said they look for information about how to achieve and maintain a healthier weight on their own, and yet 57% of those trying to lose weight feel discouraged because of unsuccessful attempts in the past.ⁱⁱ

Obstacles: Providers often have minimal training on obesity which can limit adequate resources for effective conversations. Lack of clinical time can also restrict conversations about weight. While behavioral and clinical treatment can be effective, improvised and uninformed discussions may disengage, stigmatize, or shame patients to the detriment of the provider-patient relationship, obesity treatment goals, and patient outcomes.

The Evidence: Despite the assertions that obesity is causing our society great harm, many scientists and activist groups have disputed the level of danger that it actually poses. A recent analysis presented in JAMA by Katherine Flegal et al. of the CDC calls the severity of the dangers of excess body fat into question.ⁱⁱⁱ Her group's estimate of the number of overweight and obesity-related deaths is actually about 26,000 annually as opposed to earlier estimates of 400,000.^{iv}

Some researchers think that the focus on weight, fatness, or thinness is not productive. Paul Ernsberger, a professor of nutrition at Case Western Reserve University, has been doing research since the 1980s that led him to assert that obesity is not the cause of ill health but rather the effect of sedentary living and poor nutrition.^v

Another prominent researcher, Steven Blair, former director of the Cooper Institute of Aerobics Research in Dallas, Texas, has been an author on several studies indicating that the risks associated with obesity can be significantly reduced if one engages in regular physical activity, even if weight loss is not present. According to Blair, weight loss should not be ignored but a greater focus should be placed on physical activity and good nutrition regardless of a patient's current weight.

There are many approaches to measurement of healthy weight. All of these have pluses and minuses. The arguable gold standards of hydrodensitometry, performed by underwater weighing via a submersion tank, and dual-energy X-ray absorptiometry (DEXA) scans are accurate and precise but they are not practical for clinical use. Anthropomorphic measures can be obtained readily in the clinic including Body Mass Index (BMI), abdominal circumference, waist-to-hip ratio, and skin fold thickness.

BMI has for years been the standard measurement of healthy body weight. BMI is calculated as the ratio of weight (in kg) to height (in m) squared. Weight status from "underweight" to "obese" is determined

by the calculation. BMI calculators are readily available. For example http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal or Healthy Weight
25.0 – 29.9	Overweight
30.0 and Above	Obese

But BMI is only an approximation. While it is widely used in doctors' offices, it's an imperfect measure of body fat and categorizes some muscular people as being overweight. It does not measure overall fat or lean tissue (muscle) content. While BMI gives a reasonable estimate of fatness and health risks, it tends to underestimate fatness for some elderly people, and can classify some fit and well-muscled athletes as overweight. Research has generally correlated a high BMI with health problems. But BMI does not consider where your excess fat is located: specifically that of abdominal obesity.

Waist circumference is a simple and valuable anthropometric measure of total and intra-abdominal body fat.^{vi} It is more closely linked to cardiovascular disease risk factors than is BMI.^{vii} A waist circumference measurement of over 35 inches in women and over 40 inches in men may increase risk because of the fat distribution. The clinical guidelines from the National Heart, Lung, and Blood Institute on the identification, evaluation, and treatment of overweight and obesity in adults recommend that clinicians assess waist circumference of their patients.^{viii}

Waist-to-hip ratio (WHR) is the ratio of waist circumference to hip circumference. This measurement tool looks at the relative proportion of fat stored at the waist, hips, and buttocks. WHR is calculated by dividing the waist circumference by the hip circumference. To obtain WHR use a measuring tape to:

- Measure hip circumference at the widest part of the buttocks then
- Measure waist circumference just above the iliac crest.

Calculate the waist-to-hip ratio by dividing waist circumference by the hip measurement.

WHR calculators are widely available such as <http://www.bmi-calculator.net/waist-to-hip-ratio-calculator/>

Waist-to-Hip Ratio and Risk

Male Waist-to-Hip Ratio	Female Waist-to-Hip Ratio	Health Risk
0.95 or below	0.80 or below	Low risk
0.96–1.0	0.81–0.85	Moderate risk
1.0+	0.85+	High risk

In many cases, persons with extra weight located around the middle are at higher risk for diseases such as heart disease and diabetes than those who carry weight around their hips and thighs. Abdominal fat, when out of proportion to total body fat, may be considered an indicator of health risks.

The Iowa Women's Health Study found that compared to BMI, waist circumference was superior as a risk indicator for all-cause mortality. BMI was associated with mortality in a J-shaped fashion, with mortality

rates being elevated in the leanest as well as in the most obese women. Waist/hip circumference ratio was strongly and positively associated with mortality in a linear dose-response manner.

Skin fold thickness measurement has been used to assess body fat composition for years. It is performed with a skin fold caliper which may limit its usefulness in clinical practice. Measurement protocols vary but usually include measurement at multiple sites including over the triceps, pectoral, subscapular, mid-axilla, abdomen suprailiac and quadriceps areas. Various body fat calculators are available at <http://www.linear-software.com/online.html>.

Clinical guidelines from the Expert Panel on the Identification, Evaluation, and Treatment of Overweight in Adults have recommended that when assessing risk of adiposity-related disease, both BMI and waist circumference should be considered.^{ix}

Here's How You Can Help: Most patients with obesity have tried – often repeatedly – to lose weight and improve their health. At any given time, patients may be in one of five stages of behavior change: pre-contemplation, contemplation, preparation, action, or maintenance.^x Assessing patients' stage of change can help determine how to assist them in moving forward. Most intake forms ask for height and weight. This data may be affected by a patient's self-report and independent measurement with a scales and tape measure may prove to be more accurate and reliable. Including a question on the form such as “Are you concerned about your weight?” may provide an opening to discuss healthy body weight.

Weight and obesity are especially sensitive and personal topics for most patients and providers both. Discussing weight can be a difficult experience for patients, leaving them open to feelings of embarrassment, fear, and blame. It is best to start the conversation with an empathetic statement and ask permission before bringing up this personal topic.

Having the conversation and formally diagnosing and documenting overweight or obesity is the strongest predictor of having a treatment plan in place and subsequent successful weight loss.^{xi}

One approach, the Trans Theoretical Model (TTM), characterizes patients as described previously in one of five “stages of change”: pre-contemplation, contemplation, preparation, action, or maintenance. A recent Cochrane review found very low quality evidence that the TTM when combined with diet and/or physical activity might lead to better dietary and physical activity habits.^{xii} Assessing which stage best characterizes your patient will inform your approach and recommendations. If the patient makes it clear they do not want to have this discussion about their weight, respect that choice and table the conversation for another time.

Here are some of the guidelines that have been proposed by the Association for Size Diversity and Health (ASDAH) to establish a constructive therapeutic alliance with patients. They are designed to assist professionals in helping patients achieve a healthy weight. Interventions should:

- Focus on health, not weight, and should be referred to as “health promotion” and not marketed as “obesity prevention.”
- Avoid weight-biased stigma, such as using language like “overweight” and “obesity.”
- Promote self-esteem, body satisfaction, and respect for body size diversity.
- Be constructed from a holistic perspective, where consideration is given to physical, emotional, social, occupational, intellectual, spiritual, and ecological aspects of the patient's health.

- Focus on physical activity and eating that encourages self-care as opposed to a passive “fix” such as drugs and surgery.
- Focus on modifiable behaviors where there is evidence that such modification will improve health.

These “Starters for Beginning the Conversation” may be helpful for patients who express an interest in further evaluation and clinical intervention for achieving a healthy weight:

- “Would it be okay if we discussed your weight?”
- Relate the patient’s health concerns to a healthy weight. “You mentioned a number of symptoms, such as fatigue and aching knees, which may be related to excess weight. Would you like to talk about this to see if we can help you feel better?”
- “Are you concerned about the effect of your weight on your health? Do you feel that it affects your quality of life? For example, do you find it difficult to do everyday things, like walking up a flight of stairs?”

Mind/body interventions such as mindfulness meditation and mindful eating have shown promise. Systematic reviews of mindfulness interventions have documented significant weight loss.^{xiii, xiv, xv} Daubenmier et al. reported a small RCT including 194 obese adults. Those randomized to the mindfulness arm appeared to lose more weight and sustain it at 18 months.^{xvi}

Dietary supplements are frequently marketed for weight loss. Although patients may be tempted by the “quick fix” claims of these products, most of these products haven’t been proven safe or effective.^{xvii}

There are a staggering variety of diet and weight loss plans available. When a patient asks about a specific diet plan, reviewing with them the evidence, cost, pros and cons may be helpful in setting a course that will be successful.

For patients who are interested in pursuing integrative health (IH) approaches to achieving a healthy weight it is imperative to address both diet and exercise. Physical activity interventions are a crucial part of achieving a healthy weight. A 2006 Cochrane review concluded, “We found that exercise has a positive effect on body weight and cardiovascular disease risk factors in people with overweight or obesity, particularly when combined with diet, and that exercise improves health even if no weight is lost. No data were identified on adverse events, quality of life, morbidity, costs or mortality.”^{xviii}

The American College of Sports Medicine recommends a minimum of 150 min/week of moderate-intensity physical activity to prevent significant weight gain and reduce associated chronic disease risk factors. Evidence from cross-sectional and prospective studies have indicated that weight maintenance after weight loss is improved with a reported physical activity level of >250 min/week; however, no evidence from well-designed randomized controlled trials (RCTs) exists to judge the effectiveness of physical activity for the prevention of weight regain after weight loss. Resistance training does not enhance weight loss but may increase fat-free mass and increase loss of fat mass and is associated with reductions in health risk. Existing evidence indicates that endurance training or resistance training even without weight loss improves health risk.^{xix}

Drugs and surgery are also frequently proposed weight control strategies. Pharmacotherapy typically act to decrease appetite, increase feeling of fullness, block absorption of fat, or slow gastric emptying. Each

drug carries its own cost and risk of undesirable side effects. Questions about surgical intervention are often raised by patients. While typically beyond the scope of practice for most IH providers, helping patients discover and evaluate the risks and benefits of drugs and bariatric surgery may help inform better patient decisions.

ⁱ Gunther S, Guo F, Sinfield P, Rogers S, Baker R. Barriers and enablers to managing obesity in general practice: A practical approach for use in implementation activities. *Quality in primary care*. 2012;20(2):93-103.

ⁱⁱ STOP Obesity Alliance. *Weight in America survey*. Harris Interactive. 2010.

ⁱⁱⁱ Flegal KM, Kit BK, Orpana H, Graubard BI. Association of all-cause mortality with overweight and obesity using standard body mass index categories: a systematic review and meta-analysis. *JAMA* 2013 Jan 2; 309(1):71-82.

^{iv} Flegal KM, Graubard BI, Williamson DF, Gail MH. Excess Deaths Associated With Underweight, Overweight, and Obesity. *JAMA*. 2005;293(15):1861-1867. doi:10.1001/jama.293.15.1861.

^v Cogan J and Ernsberger P. Dieting, Weight, and Health: Reconceptualizing Research and Policy. *Journal of Social Issues* Volume 55, Issue 2, pages 187–205, Summer 1999

^{vi} Lean MJ, Han TS. Am Waist worries. *J Clin Nutr*. 2002 Oct;76(4):699-700.

^{vii} ShanKuan Zhu, ZiMian Wang, Stanley Heshka, Moonseong Heo, Myles S Faith, and Steven B Heymsfield. Waist circumference and obesity-associated risk factors among whites in the third National Health and Nutrition Examination Survey: clinical action thresholds. *Am J Clin Nutr* October 2002 vol. 76 no. 4 743.

^{viii} NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: National Heart, Lung, and Blood Institute; 1998.

^{ix} NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults (US). *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda (MD): National Heart, Lung, and Blood Institute; 1998 Sep. Chapter 4, Treatment Guidelines. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK2004/>

^x ACPM. COACHING AND COUNSELING PATIENTS A Resource from the American College of Preventive Medicine. 1st ed. American College of Preventive Medicine; 2009:24. Available at: <http://www.acpm.org/?NurseCoachingClinRef> . Accessed March 18, 2016.

^{xi} Bardia A, Holtan SG, Slezak JM, Thompson WG. Diagnosis of obesity by primary care physicians and impact on obesity management. *Mayo Clin Proc*. 2007;82(8):927-932.

^{xii} Mastellos N, Gunn LH, Felix LM, Car J, Majeed A. Transtheoretical model stages of change for dietary and physical exercise modification in weight loss management for overweight and obese adults. *Cochrane Database of Systematic Reviews* 2014, Issue 2. Art. No.: CD008066.

^{xiii} Olson KL1, Emery CF. Mindfulness and weight loss: a systematic review. *Psychosom Med*. 2015 Jan;77(1):59-67.

^{xiv} Katterman SN, Kleinman BM, Hood MM, Nackers LM, Corsica JA. Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: a systematic review. *Eat Behav*. 2014 Apr;15(2):197-204.

^{xv} Robinson E1, Aveyard P, Daley A, Jolly K, Lewis A, Lycett D, Higgs S. Eating attentively: a systematic review and meta-analysis of the effect of food intake memory and awareness on eating. *Am J Clin Nutr*. 2013 Apr;97(4):728-42.

^{xvi} Daubenmier J. et al. Effects of a mindfulness-based weight loss intervention in adults with obesity: A randomized clinical trial. *Obesity* (Silver Spring). 2016 Mar 9. doi: 10.1002/oby.21396. [Epub ahead of print]

^{xvii} NCCIH Clinical Digest. *Weight Control and Complementary and Integrative Approaches*. Accessed 3/21/16 at <https://nccih.nih.gov/health/providers/digest/weightloss>

^{xviii} Shaw KA, Gennat HC, O'Rourke P, Del Mar C. Exercise for overweight or obesity. *Cochrane Database of Systematic Reviews* 2006, Issue 4. Art. No.: CD003817. DOI: 10.1002/14651858.CD003817.pub3.

^{xix} Donnelly J, et al. Appropriate Physical Activity Intervention Strategies for Weight Loss and Prevention of Weight Regain for Adults. *Medicine & Science in Sports & Exercise*: February 2009 - Volume 41 - Issue 2 - pp 459-471. doi: 10.1249/MSS.0b013e3181949333
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