



MONICA  
Monica's BMI is 35

Assessment &  
Evaluation

# Clinical overview of the AACE/ACE obesity guidelines

A guide for optimizing your approach to the  
medical care of patients with obesity

AACE, American Association of Clinical Endocrinologists; ACE, American College of Endocrinology.

Rethink Obesity®



# Assessment and evaluation

It is important to assess each individual patient thoroughly. A complete diagnosis will include both anthropometric and clinical considerations.

## Patient presentation<sup>1</sup>

- Screen positive for overweight or obesity BMI  $\geq 25$  kg/m<sup>2</sup> ( $\geq 23$  kg/m<sup>2</sup> in some ethnicities)
- Presence of obesity-related disease complication that could be improved by obesity treatment

## Diagnosis<sup>1</sup>

The diagnosis of a patient can be achieved through the following steps:

### Evaluation

- Medical history
- Physical examination
- Clinical laboratory
- Review systems, emphasizing obesity-related complications
- Obesity history: graph weight vs age, lifestyle patterns/preferences, previous interventions

### Anthropometric diagnosis

- Confirm that elevated BMI represents excess obesity
- Measure waist circumference to evaluate cardiometabolic disease risk

### Clinical diagnosis

- Normal weight:  $< 25$  kg/m<sup>2</sup> or  $< 23$  kg/m<sup>2</sup> in certain ethnicities with waist circumference below regional/ethnic cutoffs
- Overweight:  $25$  kg/m<sup>2</sup>– $29.9$  kg/m<sup>2</sup>
- Obesity:  $\geq 30$  kg/m<sup>2</sup>

For patients who are overweight or have obesity, a checklist of obesity-related complications is on page 3 of the AACE Algorithm for the Medical Care of Patients With Obesity, ranging from: None > Mild to Moderate > Severe<sup>1</sup>

BMI, Body Mass Index; AACE, American Association of Clinical Endocrinologists.

### Diagnostic categories<sup>1</sup>

Normal	Stage 0	Stage 1	Stage 2
No obesity	Patients who present with overweight (BMI $25$ kg/m <sup>2</sup> – $29.9$ kg/m <sup>2</sup> ) or obesity (BMI $\geq 30$ kg/m <sup>2</sup> ) but have NO complications	Patients with a BMI $\geq 25$ kg/m <sup>2</sup> , with one or more mild to moderate complications or who are being treated effectively with moderate weight loss	Patients with a BMI $\geq 25$ kg/m <sup>2</sup> , who have at least one severe complication or who require more significant weight loss for effective treatment

### Phases of chronic disease prevention and treatment goals<sup>1</sup>

Normal	Stage 0	Stage 1/2
<b>Primary</b> Prevent overweight/obesity	<b>Secondary</b> Prevent progressive weight gain or achieve weight loss to prevent complications	<b>Tertiary</b> Achieve weight loss sufficient to ameliorate complications and prevent further deterioration



#### Monica presented with:

- BMI of  $35$  kg/m<sup>2</sup>
- Waist circumference of 41 inches
- Hypertension (140/92 mm Hg)
- Prediabetes (A1C level of 6.3%)

Monica is considered to be in the Stage 2 obesity diagnostic category.

A1C, glycated hemoglobin.

Visit [RethinkObesity.com](https://www.rethinkobesity.com) to learn more.



# Treatment recommendations

## Treatment based on clinical judgment<sup>1</sup>

Weight classification	Treatment
Normal weight	Healthy meal plan, physical activity, health education, built environment
Stage 0	Lifestyle/behavioral therapy, consideration of pharmacotherapy if lifestyle therapy alone is not effective
Stage 1	Lifestyle/behavioral therapy, consideration of pharmacotherapy if BMI is $\geq 27$ kg/m <sup>2</sup>
Stage 2	Lifestyle/behavioral therapy, pharmacotherapy (if BMI is $\geq 27$ kg/m <sup>2</sup> ), consideration of bariatric surgery (if BMI is $\geq 35$ kg/m <sup>2</sup> )

Once the initial plateau for weight loss has been achieved, re-evaluate the obesity-related complications. If the complications have not been treated to target, then obesity treatment should be intensified or complication-specific interventions need to be employed.<sup>1</sup>

Obesity is a chronic disease and the diagnostic categories for obesity may not be static. Therefore, patients require ongoing follow-up, re-evaluation, and long-term treatment<sup>1</sup>



Monica is in Stage 2, which calls for a combination of lifestyle/behavioral therapy, pharmacotherapy, and possible bariatric surgery.



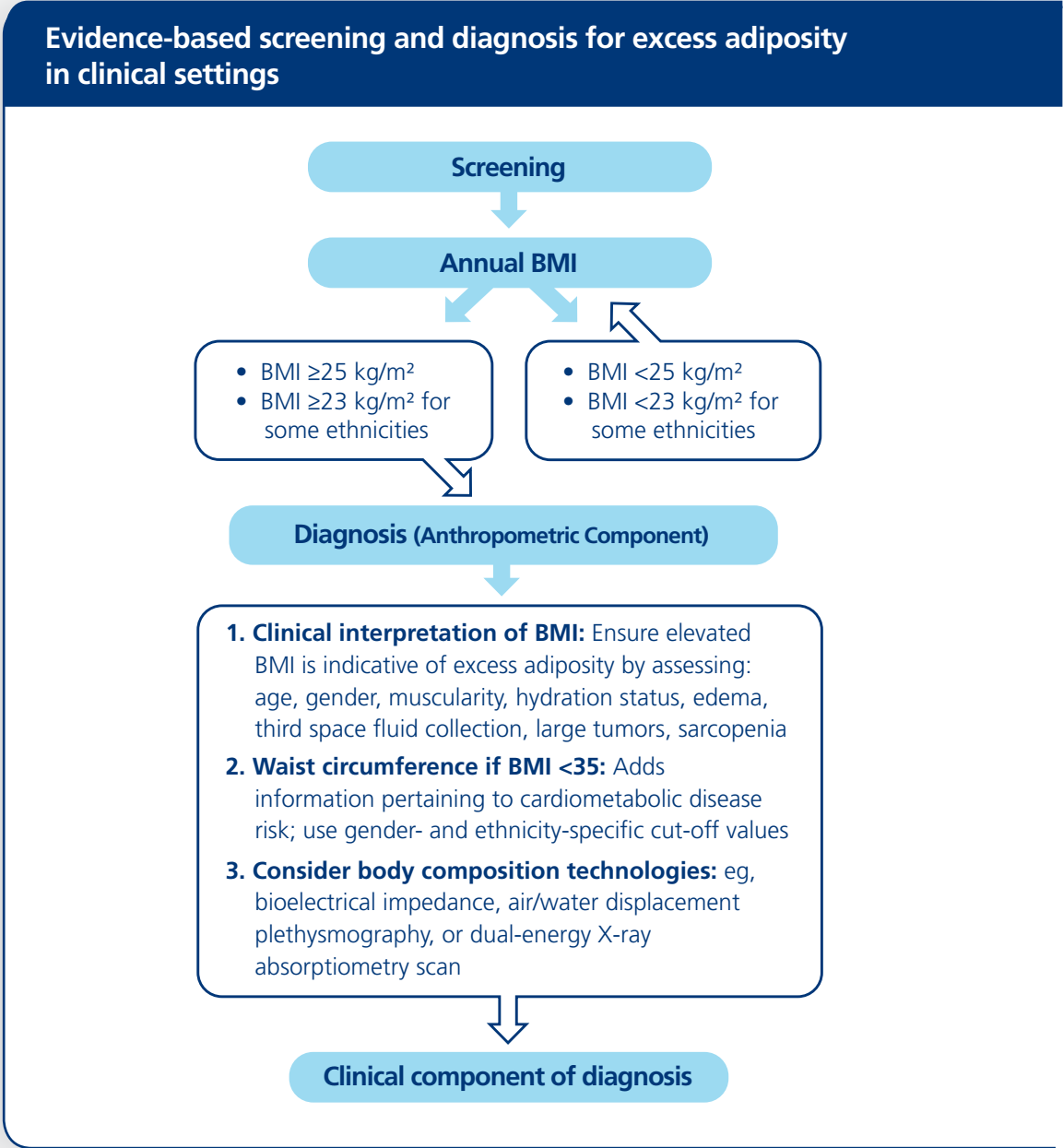
MONICA  
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# Anthropometric measurement and diagnosis

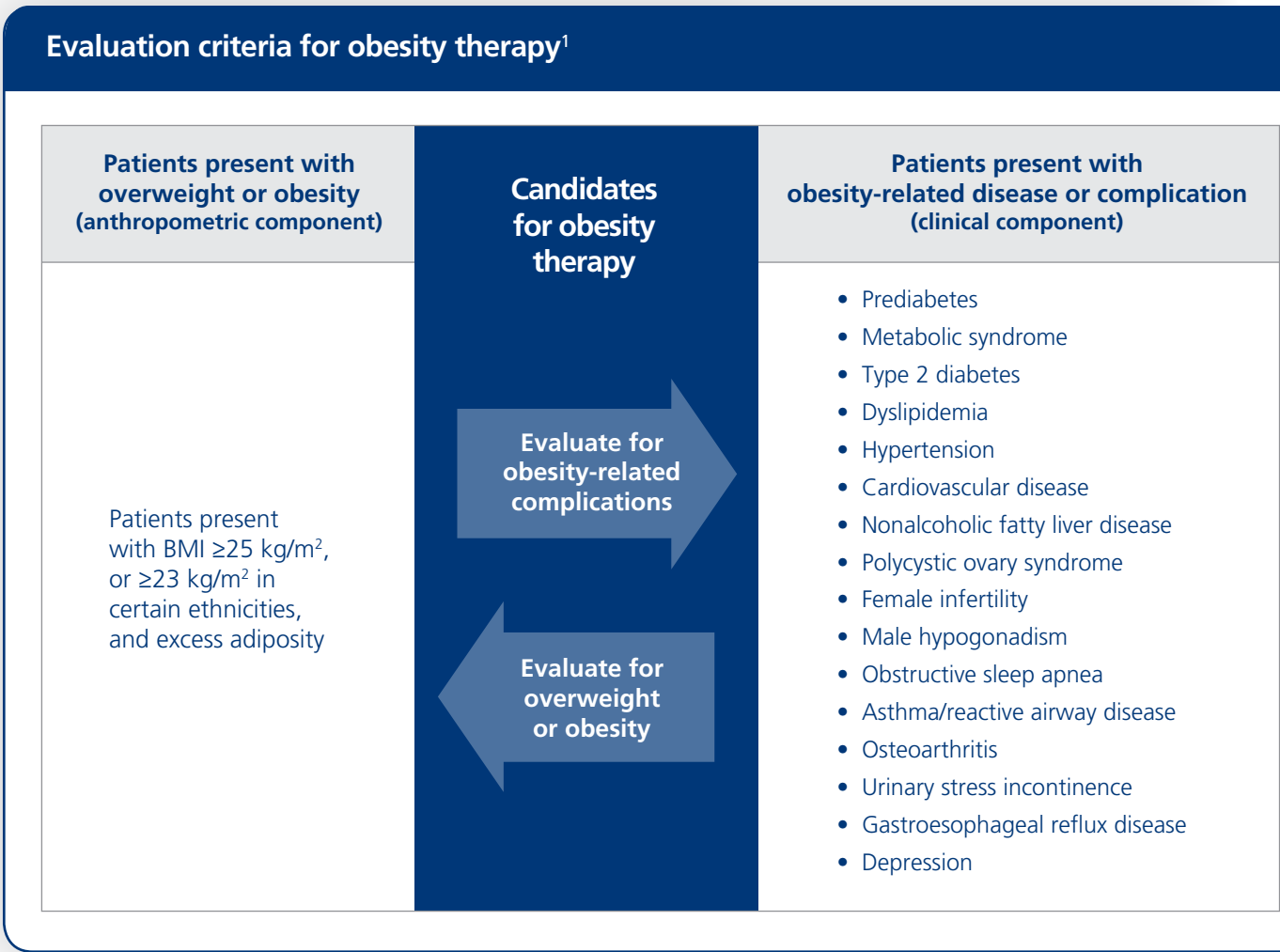
For patients with BMI  $\geq 25$  kg/m<sup>2</sup>, anthropometric diagnosis includes the following steps<sup>1</sup>:

1. Clinically interpret BMI
2. Assess waist circumference
3. Consider body composition measurement



# The clinical component of diagnosis

Patients may present with either obesity or obesity-related complications. Since complications may often present with overweight or obesity, it's important to check for both.



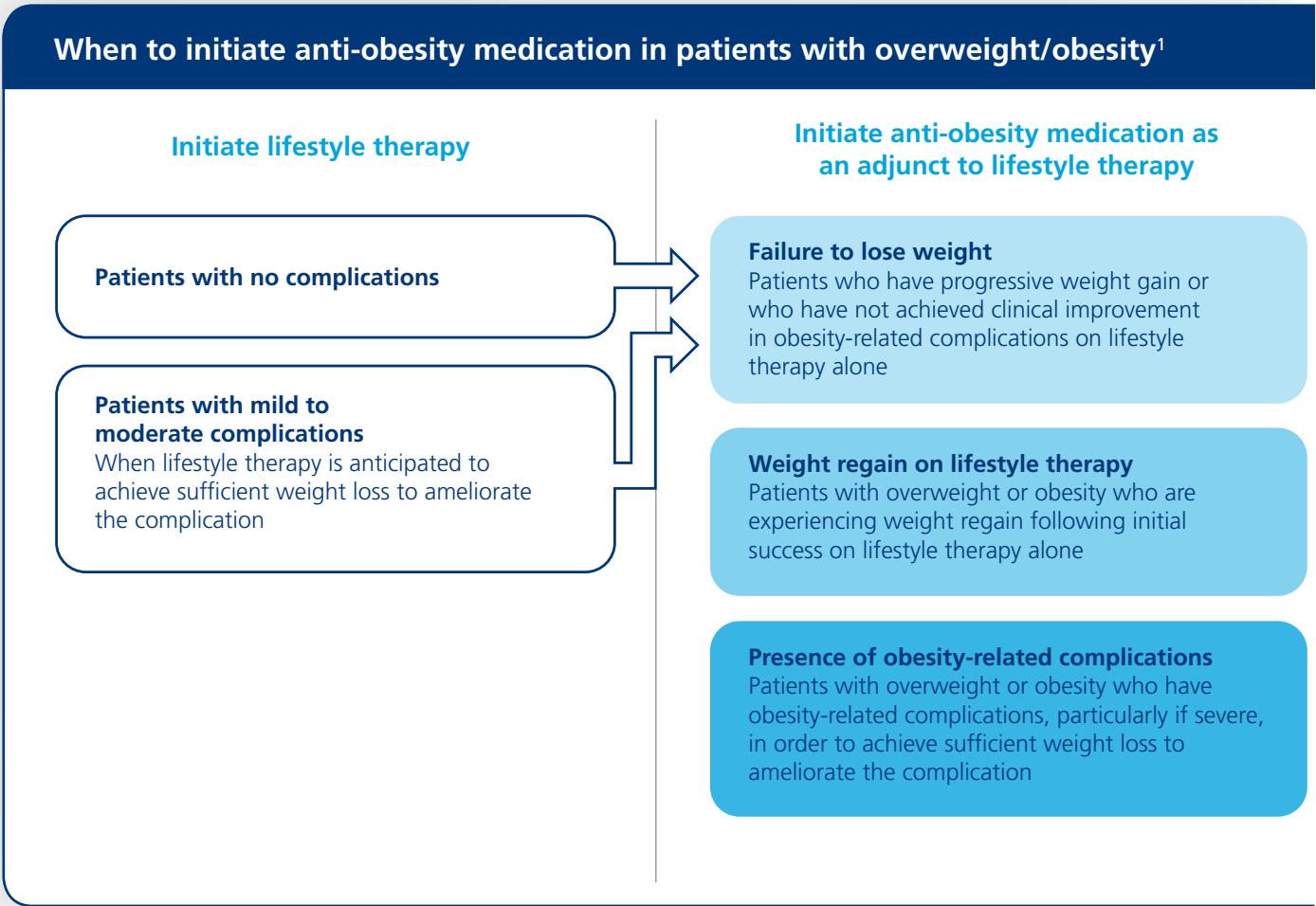
For more information on how to properly screen patients for obesity-related complications, please refer to page 3 of the AACE Algorithm for Medical Care of Patients with Obesity

# Obesity treatment options

After a patient has been diagnosed with overweight or obesity, lifestyle/behavioral modification should be implemented to help prevent further weight gain. Adjunctive treatment with pharmacotherapy for obesity management can also be considered based on clinical judgment.<sup>1</sup>

Reasons to initiate anti-obesity medication include<sup>1</sup>:

- Failure on lifestyle therapy
- Weight regain on lifestyle therapy
- Presence of obesity-related complications



For more information on preferred anti-obesity medications and how to use them, see page 6 of the AACE Algorithm for the Medical Care of Patients With Obesity<sup>1</sup>

# Evaluation-based treatment goals

Treatment goals should be based on a diagnosis that includes both anthropometric and clinical components. They should include intervention/weight loss goals and clinical goals.<sup>1</sup>

Associated risk	Weight loss goal	Clinical goal
Metabolic syndrome	10%	<ul style="list-style-type: none"><li>• Prevent type 2 diabetes</li></ul>
Prediabetes	10%	<ul style="list-style-type: none"><li>• Prevent type 2 diabetes</li></ul>
Type 2 diabetes	5%–15% or more	<ul style="list-style-type: none"><li>• Reduce A1C</li><li>• Reduce number and/or doses of glucose-lowering medications</li><li>• Diabetes remission, especially when diabetes duration is short</li></ul>
Dyslipidemia	5%–15% or more	<ul style="list-style-type: none"><li>• Lower triglycerides and non-HDL-c</li><li>• Increase HDL-c</li></ul>
Hypertension	5%–15% or more	<ul style="list-style-type: none"><li>• Lower systolic and diastolic blood pressure</li><li>• Reduce number and/or doses of antihypertensive medications</li></ul>
Asthma/reactive airway disease	7%–8% or more	<ul style="list-style-type: none"><li>• Improve FEV<sub>1</sub></li><li>• Improve symptomatology</li></ul>

A1C, glycated hemoglobin; FEV<sub>1</sub>, forced expiratory volume in 1 second; HDL-c, high-density lipoprotein cholesterol.



Based on Monica’s diagnosis of obesity with hypertension and prediabetes, a weight loss goal of 10%–15% should be set with the goal of preventing type 2 diabetes, lowering blood pressure, and reducing antihypertensive medications.

# Diagnosing and managing obesity

For patients with overweight or obesity, the principal therapeutic target should be to improve patients’ health by preventing or treating obesity-related complications. Evaluating patients for risk and obesity-related complications is critical in the development of a therapeutic plan for weight management.<sup>1</sup>

## Diagnosis and medical management of obesity<sup>1</sup>

Diagnosis		Complication-specific staging and treatment		
Anthropometric component (BMI kg/m <sup>2</sup> )	Clinical component	Disease stage	Chronic disease phase of prevention	Suggested therapy (based on clinical judgment)
<b>&lt;25</b>	<23 in certain ethnicities waist circumference below regional/ethnic cutoffs	Normal weight	Primary	• <b>Healthy lifestyle:</b> healthy meal plan/physical activity
<b>25–29.9</b>	23–24.9 in certain ethnicities	Overweight stage 0	Secondary	• <b>Lifestyle therapy:</b> Reduced-calorie healthy meal plan/physical activity/behavioral interventions
<b>≥30</b>	≥25 in certain ethnicities	Obesity stage 0	Secondary	• <b>Lifestyle therapy:</b> Reduced-calorie healthy meal plan/physical activity/behavioral interventions • <b>Anti-obesity medications:</b> Consider if lifestyle therapy fails to prevent progressive weight gain (BMI ≥27)
<b>≥25</b>	≥23 in certain ethnicities	Obesity stage 1	Tertiary	• <b>Lifestyle therapy:</b> Reduced-calorie healthy meal plan/physical activity/behavioral interventions • <b>Anti-obesity medications:</b> Consider if lifestyle therapy fails to achieve therapeutic target or initiate concurrently with lifestyle therapy (BMI ≥27)
<b>≥25</b>	≥23 in certain ethnicities	Obesity stage 2	Tertiary	• <b>Lifestyle therapy:</b> Reduced-calorie healthy meal plan/physical activity/behavioral interventions • <b>Add anti-obesity medication:</b> Initiate concurrently with lifestyle therapy (BMI ≥27) • <b>Consider bariatric surgery:</b> (BMI ≥35)

a. All patients with BMI ≥25 have either overweight or obesity stage 0 or higher, depending on the initial clinical evaluation for presence and severity of complications. These patients should be followed over time and evaluated for changes in both anthropometric and clinical diagnostic components. The diagnoses of overweight/obesity stage 0, obesity stage 1, and obesity stage 2 are not static, and disease progression may warrant more aggressive weight-loss therapy in the future. BMI values ≥25 have been clinically confirmed to represent excess adiposity after evaluation for muscularity, edema, sarcopenia, etc.

b. Stages are determined using criteria specific to each obesity-related complication; stage 0=no complication; stage 1=mild to moderate; stage 2=severe.

c. Treatment plans should be individualized; suggested interventions are appropriate for obtaining the sufficient degree of weight loss generally required to treat the obesity-related complication(s) at the specified stage of severity.

d. BMI ≥27 is consistent with the recommendations established by the US Food and Drug Administration for weight-loss medications.



**Reference: 1.** Reprinted with permission from American Association of Clinical Endocrinologists © 2016. American Association of Clinical Endocrinologists and American College of Endocrinology comprehensive clinical practice guidelines for medical care of patients with obesity. *Endocr Pract.* 2016;22(suppl 3):1-203.

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**Visit the AACE Obesity Resource Center at [obesity.aace.com](http://obesity.aace.com) for more valuable information, including:**

- A complete set of resources to help you assist patients with obesity from diagnosis to treatment and management
- How appropriately sized equipment and furnishings can ensure patient comfort
- Where to purchase appropriate equipment and furnishings

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