

Understand. Assess. Act.

CLASSIFICATION OF OBESITY

Several obesity indicators have been proposed to define and classify obesity. The indicators and criteria for Indians are summarized below:

• **Body mass index (BMI) criteria (Adults)<sup>1</sup>**

Underweight:  
Below 18.5 kg/m<sup>2</sup>

Normal weight:  
18.5 to 22.9 kg/m<sup>2</sup>

Overweight:  
23 to 24.9 kg/m<sup>2</sup>

Obesity  
Grade 1: 25 to 29.9 kg/m<sup>2</sup>  
Grade 2: 30 to 34.9 kg/m<sup>2</sup>  
Grade 3: Over 35 kg/m<sup>2</sup>

**Waist circumference<sup>1</sup>**

- Men: More than 90 cm
- Women: More than 80 cm

**Waist-to-hip ratio<sup>1</sup>**

- Men: 0.9
- Women: 0.8

**Waist-to-height ratio<sup>2</sup>**

- ≥0.5 in both genders and across ethnicities

**Body fat distribution<sup>1</sup>**

[using dual-energy X-ray absorptiometry (DXA)]

- Men: Over 25%
- Women: Over 30%

Edmonton Obesity Staging System (EOSS)

Evaluation of obesity is beyond the cut-offs. Staging of obesity using the Edmonton Obesity Staging System (EOSS) is based on medical, functional, and psychological parameters.<sup>1</sup> It can help guide management and can play a role in predicting cardiovascular events and mortality.<sup>1,3</sup>

• **Description of stages based on EOSS<sup>4</sup>**

Stage 0

- Absence of risk factors, physical symptoms, psychopathology, functional restrictions, and/or adverse impact on individual's well-being tied to obesity.

Stage 1

- Subclinical obesity-linked risk factors; mild symptoms, psychopathology, and functional restrictions; and/or impaired well-being.

Stage 2

- Obesity-linked chronic disease noted, along with moderate level of activity restriction, and/or impact on well-being of the individual.

Stage 3

- Presence of end-organ damage with significant functional restriction and psychopathology, and/or impaired well-being.

Stage 4

- Obesity-related chronic diseases causing severe disability, disabling psychopathology and functional restriction, and/or impaired well-being.

• **Action based on stage<sup>1</sup>**

Stage 0

Promote dietary changes and exercise

Stage 1

Address risk factors, promote dietary changes and exercise

Stage 2

Behavioral therapy combined with supportive pharmacotherapy<sup>#</sup>

Stage 3

Medical treatment/bariatric surgery

Stage 4

Bariatric surgery

#To address biochemical changes and comorbid conditions

• **ABCDE barophenotypic framework<sup>5</sup>**

**AdiPOSE topography**

Obesity severity, distribution of weight, rate of weight change, syndromic features

**Barometabolic behavior of the individual**

Diet, exercise, stress, sleep, addiction

**Comorbidity**

Presence of **C**omorbidities or **C**omplications

Medical illness, metabolic conditions, mechanical or musculoskeletal problems, mood disorders

**Dysfunctionality**

Emotional, social, biophysical, and biomedical challenges due to obesity

**Enthusiasm**

**Patient's Expectations and Enthusiasm**

Expectations in relation to weight reduction, inclination to modify behavior, social support, financial factors

• **How is ABCDE model applied to practice?<sup>5</sup>**

Adipose topography can point to the cause of obesity; helps in treatment decisions

Barometabolic behavior includes the evaluation of dietary patterns and composition, type and intensity of physical activity, sleep, stress, and substance abuse

Evaluation of comorbid conditions and complications is emphasized to evaluate for organ damage

Dysfunctionality encompasses the evaluation of barriers to attain optimum health

Discussion on patient's expectations helps in setting realistic goals and determine patient's ability to adhere to treatment

• **Lancet Commission definition of obesity<sup>6</sup>**

The Lancet Commission has redefined obesity and categorized it into preclinical and clinical obesity.

American Association of Clinical Endocrinology (AACE) Stages: How to relate to preclinical and clinical obesity?<sup>2,6</sup>

Preclinical obesity

Function of other tissues and organs not affected

Risk of clinical obesity and other conditions like diabetes, cardiovascular disease, etc.

AACE stage 1

Reduce Risk

Clinical obesity

Altered function of tissues or organs

Obesity-related diseases or disorders

Diseases and disorders occurring with obesity on account of shared causes and/or underlying pathophysiology (type 2 diabetes, metabolic dysfunction-associated steatohepatitis, some cancers)

AACE stage 2 or 3

Care focused on complications

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