# Obesity Complications A Holistic Approach to Care



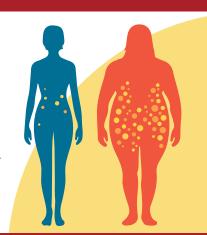
A division of the American Diabetes Association

## What is Obesity?

- Obesity is a chronic, relapsing, multifactorial neurobehavioral disease.
- It leads to adipose tissue dysfunction and results in metabolic, biomechanical, and psychosocial complications.

#### **Causes of Obesity**

- The etiology of obesity includes both modifiable and non-modifiable factors.
- Modifiable factors: eating patterns, physical activity, lifestyle habits.
- Non-modifiable factors: genetics, age, certain medical conditions.



#### **HEALTH CONSEQUENCES**

# Obesity is linked to over 200 medical conditions, including:

- Insulin resistance & type 2 diabetes
- Dyslipidemia (abnormal cholesterol levels)
- Hypertension (high blood pressure)
- Coronary artery disease & cerebrovascular disease
- Other metabolic and cardiovascular complications

**Mechanism:** Dysfunctional adipose tissue releases free fatty acids, inflammatory mediators, and adipokines, causing:

- Oxidative stress and inflammation
- Insulin resistance
- Endothelial dysfunction and changes in vascular tone
- Myocardial remodeling
- Other metabolic consequences



Obesity is directly associated with decreased life expectancy.

#### **OBESITY TREATMENTS**



Nutrition Therapy



Physical Activity



Behavioral Modifications



Medical interventions



Surgical interventions



### **Challenges in Obesity Management**

Recurrence of weight gain is common due to metabolic adaptation:

- Slower metabolism after weight loss
- Increased hunger hormones
- Decreased satiety hormones

This cycle makes long-term weight maintenance challenging, highlighting the importance of combination therapy.