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OBESITY, ITS TYPES. ETIOLOGY AND PATHOGENESIS

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Obesity, a complex and multifactorial health condition, is characterized by an excess accumulation of body fat, leading to adverse effects on an individual's well-being. In defining obesity, it transcends a mere issue of body weight, encompassing a range of physiological, psychological, and societal implications. This report aims to delve into the intricate landscape of obesity, dissecting its types, exploring the underlying causes (etiology), and unraveling the physiological processes that contribute to its development (pathogenesis).

Obesity manifests in various forms, each presenting distinct characteristics and health implications.

Central Obesity: Central obesity, also known as abdominal obesity, is characterized by an excess accumulation of fat around the abdominal region. This type of obesity is often associated with an "apple-shaped" body. The fat distribution around the abdomen, particularly visceral fat, has been linked to increased health risks, including cardiovascular diseases and metabolic disorders.

Visceral Obesity: Visceral obesity specifically refers to the accumulation of fat within the abdominal cavity, surrounding vital organs such as the liver, pancreas, and intestines. This type of fat is metabolically active and releases substances that contribute to inflammation and insulin resistance. Visceral obesity is a key component of the metabolic syndrome, further elevating the risk of cardiovascular diseases.

Android vs. Gynoid Obesity: Android obesity is characterized by the predominant accumulation of fat in the upper body, particularly around the abdomen and chest. This distribution is more common in males and is associated with a higher risk of cardiovascular diseases. In contrast, gynoid obesity involves a greater deposition of fat in the lower body, particularly around the hips and thighs. This pattern is more prevalent in females and is considered to have a lower risk for metabolic complications.

BMI Categories and Implications: Body Mass Index (BMI) is a widely used tool for categorizing individuals based on their weight relative to height. Understanding BMI categories is crucial for assessing the health risks associated with obesity.

- Underweight (BMI < 18.5): While not directly related to obesity, being underweight can also have health implications, including nutritional deficiencies and weakened immunity.

- Normal Weight (BMI 18.5 - 24.9): Individuals in this range generally have a lower risk of obesity-related health issues.

- Overweight (BMI 25 - 29.9): This category signifies an increased risk of developing obesity-related conditions.

- Obesity Class I (BMI 30 - 34.9): Moderate risk of health problems.

- Obesity Class II (BMI 35 - 39.9): High risk of health problems.

- Obesity Class III (BMI ≥ 40): Very high risk, often referred to as morbid obesity.

Obesity is a complex condition influenced by a multitude of factors, encompassing genetics, environment, and psychological aspects.

The pathogenesis of obesity involves a complex interplay of physiological processes influenced by various factors: excessive calorie intake, adipose tissue dynamics, hormonal regulation, insulin resistance, and metabolic syndrome contribute to the development of obesity. Obesity exerts a profound impact on various aspects of health, encompassing physical, metabolic, and psychological dimensions. Obesity prevention and management require a multifaceted approach, involving individuals, communities, and healthcare systems. Obesity poses a significant and escalating societal burden, impacting public health on various levels. Addressing this issue requires comprehensive strategies that encompass policy initiatives, public awareness campaigns, and interventions aimed at fostering healthier environments.