

OBESITY

Obesity is more than being considerably overweight.

- Body Mass Index (BMI) is calculated by dividing a person's body weight in kilograms by the height in meters squared (weight [kg] height [m]²) or by using the conversion with pounds (lbs) and inches (in) squared.

$$[\text{Weight (lbs)} \div \text{height (in)}^2] \times 704.5 = \text{BMI}$$

The BMI cutoffs are:

Below 18.5	Underweight
18.5-24.9	Normal weight
24.5-29.9	Overweight
30 and greater	Obese
40 and greater	Morbid or extreme obesity

- Waist circumference is another widely used measurement to determine abdominal fat content. An excess of abdominal fat, when out of proportion to total body fat, is considered a predictor of risk factors related to obesity.

- Men with a waist measurement exceeding 40 inches
 - ◆ Women with a waist measurement of 35 inches or greater. (adapted from The Obese Society Guidelines)

Being fat also affects the skin in several ways:

- Acanthosis nigricans – dark, furry patches on the nape and in the axillae (Figure 1)
- Circulatory problems
 - Elephantiasis
 - Lymphedema
 - Stasis dermatitis (Figure 2)



Figure 1: Acanthosis nigricans due to obesity



Figure 2: Stasis dermatitis aggravated by obesity



Figure 3: Intertrigo and striae resulting from obesity

- Cutaneous infections
 - More common
 - ◆ Candidosis (yeast infection)
 - ◆ Erythrasma
 - ◆ Folliculitis
 - ◆ Furunculosis
 - ◆ Intertrigo (Figure 3)
 - ◆ Tinea cruris (jock itch)
 - Less common
 - ◆ Cellulitis
 - ◆ Gas gangrene
 - ◆ Necrotizing cellulitis
- Plantar hyperkeratosis
- Psoriasis
- Skin tags (acrochordons, fibro-epithelial polyp) – small, pedunculated lesions, most often on the neck or in the axillae. More frequently, associated with obesity
- Striae (stretch marks) (Figure 3)
- Sweat gland afflictions
 - Hidradenitis suppurativa
 - Hyperhidrosis
- Syndromes
 - Laurence-Moon-Biedl-Bardet syndrome (hypogonadism, mental retardation, obesity, polydactyly, renal failure, and retinitis pigmentosa)
 - Prader-Willi syndrome (preoccupation with food and constant hunger, hypotonia (floppy baby syndrome), delayed mental development obesity and obesity–related health problems, and stunted growth cognitive delays).

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