# OBESITY MANAGEMENT IN PRIMARY CARE CERTIFICATE PROGRAM:

A Practice Management & Leadership Training Program for PAs and NPs



## Module 3: History and Physical Exam Understanding Insulin Resistance: Patient Handout

Insulin Resistance refers to a complex metabolic state that affects your body's ability to use insulin effectively. This results in the accumulation of excess adipose (fat tissue) and widespread inflammation.

#### Insulin Sensitivity

Insulin is a hormone produced by the pancreas that keeps your blood sugar at normal levels. It does so by triggering cells in the body to absorb glucose (blood sugar) so that it can be removed from the blood and used as metabolic fuel. When this process is working well, we call it insulin sensitivity. **In this state, the body is burning excess adipose.** 

#### **Insulin Resistance**

When cells lose their ability to absorb glucose, blood levels of glucose become high. When this happens, the pancreas increases its insulin production and blood insulin levels become high. We call this state insulin resistance.

Insulin resistance sets off a host of metabolic processes that result in the formation of excess body fat and inflammation throughout the body. As these processes continue, excess body fat is accumulated, and insulin resistance rises. As the cycle continues, a person gains weight more easily and has a more difficult time losing it, which worsens insulin resistance.

### In short:

- 1. **Insulin Resistance** produces weight gain and increased adipose deposits in many areas of the body.
- 2. **Insulin Sensitivity** helps your body to shift to its healthiest weight and burn excess adipose tissue.