## COMMENTARY

# **Diabetes Management**

# Blood sugar balance: Key strategies for health and wellness



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#### Description

Blood sugar control plays a pivotal role in maintaining overall health and well-being. Whether they have diabetes or not, keeping the blood sugar levels within a healthy range is essential for preventing various health complications and promoting longevity. This article discusses about the importance of blood sugar control, explore factors affecting blood sugar levels, and discuss effective strategies for managing and regulating blood sugar.

Blood sugar, also known as glucose, is the primary source of energy for the body's cells. It comes from the foods we eat, primarily carbohydrates, which are broken down into glucose during digestion. Insulin, a hormone produced by the pancreas, helps transport glucose from the bloodstream into the cells, where it is used for energy.

Maintaining optimal blood sugar levels is critical for several reasons are given below.

- Balanced blood sugar levels ensure a steady supply of energy to the body's cells, tissues, and organs.
- Stable blood sugar levels help regulate appetite and reduce cravings for unhealthy, sugary foods, thereby supporting weight management efforts.
- Proper blood sugar control can reduce the risk of developing chronic diseases such as type 2 diabetes, heart disease, and stroke.
- Fluctuations in blood sugar levels can

- affect mood, concentration, and cognitive function. Stable blood sugar levels contribute to overall mental well-being and emotional stability.
- Several factors can influence blood sugar levels, including:
- The types and amounts of carbohydrates, fats, and proteins consumed can impact blood sugar levels. Foods high in refined sugars and carbohydrates tend to cause rapid spikes in blood sugar, while fiber-rich foods and complex carbohydrates result in slower, more gradual increases.
- Regular exercise helps regulate blood sugar levels by increasing insulin sensitivity and promoting glucose uptake by muscles for energy.
- Certain medications, such as corticosteroids and some antidepressants, can affect blood sugar levels and insulin sensitivity.
- Stress hormones can cause blood sugar levels to rise by triggering the release of glucose from the liver into the bloodstream.
- Inadequate sleep or poor sleep quality can disrupt hormonal balance and lead to insulin resistance, resulting in elevated blood sugar levels.

#### ■ Strategies for blood sugar control

Balanced diet: Focus on a well-balanced diet rich in whole foods, including fruits, vegetables,

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### **COMMENTARY**

lean proteins, and healthy fats. Limit intake of sugary beverages, processed foods, and refined carbohydrates.

**Portion control:** Monitor portion sizes to avoid overeating and maintain stable blood sugar levels throughout the day.

Regular exercise: Aim for at least 150 minutes of moderate-intensity exercise per week, such as brisk walking, jogging, cycling, or swimming. Incorporate strength training exercises to improve muscle mass and insulin sensitivity.

Blood sugar monitoring: Monitor blood sugar levels regularly, especially if patients have diabetes or are at risk of developing it. Use a glucometer to track fluctuations and make necessary adjustments to the diet, exercise, and medication regimen.

**Stress management:** Practice stress-reducing techniques such as mindfulness meditation, deep breathing exercises, yoga, or tai chi to help lower stress levels and stabilize blood sugar.

Adequate sleep: Aim for 7-9 hours of quality sleep per night to support hormonal balance and improve insulin sensitivity.

Mastering blood sugar control is a cornerstone of optimal health and well-being. By adopting healthy lifestyle habits, including a balanced diet, regular exercise, stress management, and adequate sleep, individuals can effectively regulate blood sugar levels and reduce the risk of developing chronic diseases such as diabetes and heart disease. Remember that small, consistent changes can yield significant improvements in blood sugar control and overall health over time.