The link between obesity and prevalence of type 2 diabetes in Bangladesh



> **"Being slim does not necessarily mean being metabolically healthy. Diabetes risk should not be assessed solely through appearance or body weight."**

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Obesity and type 2 diabetes are closely linked, with excess abdominal fat increasing insulin resistance and the risk of developing diabetes. Unhealthy diets, physical inactivity and changing urban lifestyles are contributing to the growing burden of both conditions in Bangladesh, says Prof Dr. M Saifuddin, Professor of Endocrinology at Dhaka Medical College and General Secretary of the Bangladesh Endocrine Society (BES). In an interview with The Daily Star, he discusses the relationship between obesity and diabetes, the particular risks facing South Asians and the importance of early intervention through healthier lifestyles and stronger healthcare services.

The Daily Star (TDS): How closely are obesity and diabetes connected, and why are they increasingly becoming a public health concern in Bangladesh?

Prof Dr. M Saifuddin (MS): Obesity and type 2 diabetes are closely connected, often described together as "diabesity". Excess body fat, particularly around the abdomen, causes insulin resistance, increasing the risk of diabetes.

In Bangladesh, unhealthy diets, physical inactivity and rapid urbanisation are contributing to both conditions. They also frequently coexist with hypertension, abnormal cholesterol and fatty liver disease, increasing the risk of heart disease, stroke and kidney complications. These conditions place an additional burden on healthcare expenses, productivity and quality of life. Obesity should therefore be recognised as a serious medical condition rather than simply a cosmetic concern.

TDS: Why are South Asians, including Bangladeshis, more vulnerable to developing type 2 diabetes at comparatively lower body weights?

MS: South Asians tend to accumulate more abdominal and visceral fat, even at relatively lower body weights. They also generally have lower muscle mass, greater insulin resistance and increased genetic susceptibility.

Consequently, Bangladeshis may develop type 2 diabetes at a BMI considered normal in other populations. This means body weight alone cannot accurately reflect diabetes risk. Regular screening and monitoring waist circumference, alongside adopting healthier lifestyles, are particularly important for South Asian populations.

TDS: How does excess abdominal fat contribute to insulin resistance, and why should waist circumference be considered alongside BMI?

MS: Excess abdominal fat releases inflammatory substances and fatty acids that interfere with normal insulin action. As a result, body cells become less responsive to insulin, causing blood glucose levels to rise.

BMI indicates overall weight status but cannot identify fat distribution or distinguish fat from muscle. Waist circumference provides additional information about abdominal obesity and metabolic risk. For South Asian adults, waist measurements of 90cm or more in men and 80cm or more in women indicate increased metabolic risk. Assessing both measurements therefore provides a more comprehensive picture of diabetes risk.

- Excess abdominal fat increases insulin resistance and the risk of developing type 2 diabetes.
- South Asians can develop type 2 diabetes at lower body weights than other populations.
- Being slim does not necessarily mean being metabolically healthy.
- Unhealthy diets, sugary drinks and physical inactivity are increasing diabetes risks among younger Bangladeshis.
- Early screening and sustained lifestyle changes can reduce diabetes risk and prevent complications.

TDS: Are younger adults and children increasingly developing obesity-related metabolic problems in Bangladesh? What is driving this trend?

MS: Yes. Obesity-related metabolic problems are increasingly affecting younger Bangladeshis. Unhealthy lifestyles are contributing to type 2 diabetes at younger ages, with frequent consumption of fast food and sugary beverages, prolonged screen time, insufficient physical activity and inadequate sleep being major factors.

Consequently, children and adolescents may develop insulin resistance, fatty liver disease, hypertension and even type 2 diabetes. These problems can continue into adulthood, increasing the risk of future complications. Parents and schools should encourage balanced diets, regular outdoor activities and healthy daily routines from childhood.

TDS: Can someone who appears relatively slim still have excess visceral fat and a high risk of developing diabetes?

MS: Being slim does not necessarily mean being metabolically healthy. Some individuals have normal body weight but excessive visceral fat surrounding internal organs, particularly around the liver and abdomen. This is associated with normal-weight obesity.

Such individuals may have relatively low muscle mass but increased insulin resistance, making them vulnerable to diabetes, fatty liver disease and cardiovascular complications. This pattern is particularly relevant among South Asians. Diabetes risk should therefore not be assessed solely through appearance or body weight. Waist circumference, blood glucose, blood pressure and family history should also be considered.

TDS: What dietary and lifestyle patterns in urban Bangladesh are contributing to the rise of obesity and diabetes, and which habits should people prioritise changing?

MS: Urban lifestyles increasingly involve excessive consumption of refined carbohydrates, fried foods, processed snacks and sugary beverages, alongside prolonged sitting and limited exercise. Irregular sleep and unhealthy eating patterns further increase metabolic risk.

People should prioritise portion control, balanced meals, increased vegetable consumption and reduced intake of added sugar. Adults should aim for at least 150 minutes of moderate-intensity physical activity each week, alongside muscle-strengthening activities. Even a modest weight reduction of 5–7% can significantly improve insulin sensitivity and reduce diabetes risk in high-risk individuals. Consistent lifestyle changes are more beneficial than temporary dieting.

TDS: How should Bangladesh address the overlapping challenges of obesity and diabetes through public awareness, food policies, schools and healthcare services?

MS: Bangladesh needs a comprehensive prevention strategy combining public awareness, healthier food policies and stronger primary healthcare. Schools should promote nutrition education, balanced meals and regular physical activity.

Public campaigns should emphasise waist measurement, healthy lifestyles and early diabetes screening. Policies encouraging healthier food choices and limiting excessive consumption of sugary beverages are also important.

Healthcare facilities should prioritise identifying obesity, prediabetes and other metabolic risk factors before complications develop. Community-based screening, lifestyle counselling and regular follow-up can strengthen prevention. Most importantly, recognising obesity as a chronic medical condition and promoting early intervention can significantly reduce the future burden of diabetes in Bangladesh.