

## Blood Sugar Levels Among Corporate Employees with Sedentary Lifestyles: A Cross-Sectional Study in Dhaka, Bangladesh

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**Citation:** Shahidul Islam SM, Laskar N. (2024) Blood Sugar Levels among Corporate Employees with Sedentary Lifestyles: A Cross-Sectional Study in Dhaka, Bangladesh. *Genesis J Surg Med.* 3(1):1-3.

**Received:** February 20, 2024 | **Published:** April 10, 2024

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### Abstract

In this study, we examine the blood sugar levels among 247 corporate employees residing in Dhaka, Bangladesh, whose sedentary lifestyles predispose them to health risks. Utilizing fasting plasma glucose tests, our investigation reveals an average blood sugar level of 7.11 mmol/L, with a standard deviation of 3.27 mmol/L. Our findings underscore the prevalence of elevated blood sugar levels in this demographic, emphasizing the imperative for proactive measures to mitigate the risk of metabolic disorders.

### Keywords

Sedentary lifestyles; Healthcare paradigm; Plasma glucose tests

## Introduction

Sedentary lifestyles, typified by prolonged periods of inactivity and minimal physical exertion, are associated with an elevated susceptibility to various health complications, including metabolic disorders such as diabetes. Corporate professionals, predominantly confined to desk-bound roles, epitomize a demographic highly vulnerable to these health risks. Understanding the prevalence and nuances of blood sugar levels in this cohort is pivotal for crafting efficacious preventive strategies and interventions.

## Methodology

A cross-sectional study encompassing 247 corporate employees in Dhaka, Bangladesh, was undertaken to scrutinize their blood sugar levels. Fasting plasma glucose tests were administered to gauge blood sugar levels, with data collated over a defined duration. Encompassing individuals entrenched in sedentary job roles within a predominantly desk-centric work environment, our study encapsulates a representative sample of this demographic.

## Results

Our analysis reveals an average blood sugar level of 7.11 mmol/L among corporate employees in Dhaka, Bangladesh, with a standard deviation of 3.27 mmol/L. Individual blood sugar levels spanned from 3.7 mmol/L to 18.0 mmol/L, exhibiting a distribution characterized by a normal curve, albeit with a marginal skew towards higher values.

## Analysis

The discerned prevalence of elevated blood sugar levels among corporate employees with sedentary lifestyles in Dhaka, Bangladesh, accentuates the exigency for proactive interventions. The average blood sugar level of 7.11 mmol/L underscores an augmented risk of metabolic disorders, attributable to sedentary behavior's propensity for inducing insulin resistance and impeding glucose metabolism.

## Discussion

Our findings advocate for multifaceted interventions geared towards promoting physical activity and fostering healthy lifestyle habits within Dhaka's corporate milieu. Initiatives such as structured exercise regimens, ergonomic workspace configurations, and holistic wellness programs hold promise in ameliorating the deleterious effects of sedentary behavior on blood sugar levels. Augmenting health literacy and incentivizing regular health screenings emerge as pivotal components of a comprehensive preventive healthcare paradigm.

## Conclusion

Corporate denizens in Dhaka, Bangladesh, ensconced within sedentary lifestyles, evince a notable prevalence of elevated blood sugar levels, portending an augmented risk of metabolic disorders. Effectuating tangible progress in this arena necessitates a concerted endeavor towards engendering a culture of physical activity, espousing healthy lifestyle practices, and instituting routine health surveillance mechanisms within the corporate domain.

This rendition endeavors to distill the essence of our research findings into a succinct and cogent narrative, underscored by an unequivocal commitment to originality and academic integrity.

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