## **ABSTRACT**

Abstract Title:

# Healthy Habits, Healthy Blood Sugar: The Role of Diet in Diabetes Control

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#### **Introduction:**

Diabetes Mellitus, commonly referred to as diabetes, is a group of metabolic disorders characterized by high blood sugar levels (hyperglycemia) due to defects in insulin secretion, insulin action, or both, it is a bad lifestyle disease. The worldwide prevalence rate of diabetes mellitus is approximately 10.5% among adults aged 20-79 years, which translates to around 540 million people living with diabetes globally. Major three types of diabetes are Type-1(Insulin Dependent Diabetes Mellitus), Type-2(Non-insulin Dependent Diabetes Mellitus), Gestational Diabetes Mellitus A well-balanced diet plays a crucial role in managing diabetes, improving quality of life, and reducing complications.

# **Objective:**

To highlight the important role of a well-balanced diet in diabetes management. To focus, on modifications of lifestyle through regular physical activity, weight management and stress reduction.

# **Methods:**

We conducted some diabetes awareness camps and workshops in different places. The methods that we use to detect diabetic persons are given below; Glycated Hemoglobin (HbA1c) testing, Fasting Plasma Glucose (FPG), Oral Glucose Tolerance Test (OGTT), Body Mass Index (BMI) measurement, blood pressure measurement, assessment neuropathy and foot health, screens for diabetic retinopathy. Lipid profile test, liver function tests (LFT) and also check the creatinine level.

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## **Result:**

The spontaneous and continuous workshop and awareness camp gave us a positive result in finding out the diabetic patient, categorizing the diabetes type and improving their health status by providing nutritional and dietary guidelines such as low carbohydrate diet intake, moderate protein consumption, mono and polyunsaturated fat intake and also dietary fiber, legumes, whole grains consumption.

## **Conclusion:**

A well-balanced diet, combined with lifestyle modifications, is essential for effective diabetes management. By adopting a personalized, evidence-based nutrition plan, individuals with diabetes can improve their quality of life, reduce complications, and achieve optimal health outcomes.

Keywords: Type-1 and type-2 Diabetes mellitus, HbA1c, BMI, Well-balanced diet, Lifestyle modifications.