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Research Article

### ANALYSIS OF ROLE OF DIFFERENT DIETARY INTAKES IN HEALTH OUTCOMES OF INDIVIDUALS WITH DIABETES TYPE II

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**Abstract:**

**Objective of study:** The basic aim of the study is to find the role of different dietary intakes especially protein in health outcomes of individuals who is suffering from diabetes type II in Pakistani environment.

**Methodology of the study:** The cross sectional study was conducted at BVH, Bahawalpur during January 2019 to July 2019. There was 200 patients which was visit the health center during this time period.

**Results:** Results of current research shows that dietary intake has direct effect on diseases person. High intake of carbohydrate and protein increased the blood sugar level.

**Conclusion:** It is concluded that dietary intake has direct effect on type 2 diabetes patients. Healthy eating pattern may lead towards the control of this diseases otherwise the condition get worse. And healthy eating pattern include balanced carbohydrate, protein and fats and theses are associated with plasma glucose level.

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**INTRODUCTION:**

Diabetes is a major cause of mortality globally, and it has been estimated that 400 million people worldwide will suffer from it by 2030. Despite the fact that hereditary qualities seems to assume an essential part in the advancement of diabetes, examine recommends that dietary decisions driven by natural and financial components are of critical significance. Amazing eating regimens assume an essential part in diabetes avoidance. [1] Suitable dietary adherence can enhance insulin affectability and glycemic control, and consequently add to way of life change and general personal satisfaction. Nonetheless, past research recommends that dietary adherence is seemingly among the most troublesome foundations of diabetes administration. [2] Higher HEI scores demonstrate nearer adherence to current dietary rules for singular food and supplement gatherings. For the sufficiency segments, for example, vegetables and natural product, a higher score demonstrates higher utilization. Dietary proposals depend on the useful effects of devouring products of the soil and expressly stress their constructive outcomes of decreasing corpulence and certain sorts of growths. The last three segments of the HEI incorporate refined grains, sodium, and discharge (calories from strong fats, liquor, and included sugars) and a higher score demonstrates bring down utilization. [3,4]

The 2013 American Diabetes Association (ADA) standards of care prescribe an individualized way to deal with basic leadership as to protein admission and dietary macronutrient composition. 3 Factors to be considered incorporate the metabolic status of the patient (e.g., lipid profile, renal capacity) and additionally food inclinations. [5] With regards to diabetes, the monetary moderateness (e.g., food security), availability, and agreeableness (e.g., food culture) have been talked about as potential boundaries to meeting and adherence to prescribed dietary rules. [6] The eating routine wellbeing behavior of diabetes patients and techniques to conquer potential

obstructions to adherence to prescribed dietary rules are key general wellbeing and diabetes wellbeing concern. In this manner, there is have to measure the connection between eat less quality, corpulence, and diabetes. [7]

**Objectives of the study:**

The basic aim of the study is to find the role of different dietary intakes especially protein in health outcomes of individuals who is suffering from diabetes type II in Pakistani environment.

**Methodology of the study:**

The cross sectional study was conducted at BVH, Bahawalpur during January 2019 to July 2019. There was 200 patients which was visit the health center during this time period.

**Data collection:**

We assess the nutritional and economic health of patients by asking some survey questions. From the large pool of data we select health status, diet quality, lifestyle, food culture, food security, and demographic information of the selected patients. The economic and health status describe the level of awareness regarding disease.

**Statistical analysis:**

The collected data were analyzed using SPSS software (version 17). The results are presented as a mean with 95% confidence interval limits or standard deviations. The significant value for  $P < .05$  was accepted as statistically significant.

**RESULTS:**

The data was collected from 200 male and females patients who visit the health care center. The analysis of the data shows that diabetes is more common in females as compared to males. The reason is that because women have different conditions and working environment as compared to males (Table 01 and figure 01).

**Table 01:** Distribution of patients based on gender

Sr.No	Gender	
01	Male	20
02	Female	180

We also collect the basic characteristics of patients and compared these values with normal values. So we can find that diseases person have more blood pressure

value as compared to normal. People who suffer from diabetes also suffer from high blood pressure problem (Table 2a).

**Table 02 (a):** Basic characteristics of patients

Diseases age	35±5
Poor class	49%
Middle class	40%
Upper class	10.7%
educated	11.7%
Illiterate	55%
Active life style	25%
Normal life style	67%

Table 2(b) explains the demographical conditions of the patients. This table explains the co-efficient and standard error values. The level of confidence interval is 90 and 95 in this table for the significant value.

**Table 02 (b):** Demographic characteristics and history of patients

Variables	Co-efficient	SE
Blood pressure	0.048	0.35
Healthy eating index (HEI)	-0.059	0.05
Smoker	0.060	0.80
Food security	0.106	0.12
Drinker	-0.343	0.08
Belong to city area	0.057	0.01
Belong to rural area	0.59	0.70
BMI	0.5460.24	

Indicate significance at the 99, 95, and 90% level:

**Table 03:** Daily Consumption of Food Groups in Patients with Type 2 Diabetes According to Eating Patterns

Food Groups (% of Total Caloric Intake)	Eating Patterns		P Value
	Unhealthy (n = 100)	Healthy (n = 97)	
Whole carbohydrates	0.0 (0.0–2.4)	10.1 (3.5–17.5)	0.001
Fried foods	1.5 (0.1–5.2)	0.9 (0.0–4.3)	0.450
Dairy	8.0 (3.9–11.7)	11.0 (7.4–16.1)	0.001
Sweets and desserts	3.2 (0.5–7.2)	2.1 (0.3–4.7)	0.032
Red meat	10.0 (6.1–13.6)	11.4 (6.1–14.8)	0.217
Fish	0.0 (0.0–0.1)	0.0 (0.0–1.4)	0.035
Fruits	12.4 (7.7–16.3)	16.7 (12.5–21.6)	0.001
Vegetables	2.3 (1.5–3.6)	3.5 (2.5–5.7)	0.001
Vegetable oils	2.2 (1.3–4.9)	2.5 (0.6–4.6)	0.218

### DISCUSSION:

This study focuses on the investigating the linkage between diabetes, diet-health behavior, and health outcomes that are frequently discussed in the context of diabetes management, public health, and diet quality and BMI. It is realized that carbohydrates are the supplements that most influence blood glucose levels. [8] Be that as it may, up to now there is no agreement prove about the perfect measure of carbohydrate intake for individuals with diabetes. Truth be told, in the present investigation, the carbohydrate utilization did not vary between the unhealthy and healthy gathering. [9] The relationship between healthy eating pattern and glycemic control

could be better clarified by the nature of carbohydrate intake than the measure of this macronutrient. In concurrence with this, we exhibited a higher utilization of entire carbohydrates, natural products, and vegetables in this gathering of patients. [10] As an outcome, these patients devoured diets with a lower glycemic record and glycemic stack esteems as contrasted and patients in the unhealthy eating pattern. Presently, diets with a low glycemic list have been related with enhanced glycemic control. [11, 15].

### CONCLUSION:

It is concluded that dietary intake has direct effect on type 2 diabetes patients. Healthy eating pattern may

lead towards the control of this diseases otherwise the condition get worse. And healthy eating pattern include balanced carbohydrate, protein and fats and theses are associated with plasma glucose level.

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