

Diabetic Condition of Persons and their Awareness towards Daily Fruit Consumption with Special Reference to the Mango

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Abstract

Diabetes mellitus commonly known as diabetes, it is a disorder of carbohydrates metabolism characterized by high blood sugar level and presence of sugar in urine. If diabetes not kept under control a number of complication occur. These include eye disorder leading to blindness, kidney dysfunction. Control of diabetes rates depends on three factor like diet, exercise and insulin. Two types of diabetes, type 1 insulin dependent diabetes mellitus (IDDM), type 2 Non insulin dependent diabetes mellitus (NIDDM). Aims and adjective of my study is to know nutritional awareness regarding the diet related to fruit consumption special reference with mango .study is carried out with total number of respondents (500) and information collected by Questionnaire or schedule method and direct interview method. My study is divided in to Introduction, Aims and Objectives, Methodology, Data collection and analysis, conclusion and recommendation, Reference.

Keywords: Hyperglycemia, Glycosuria, Nutrition, Diabetes, Prediabetes, Malignant tumor, Genetic aberration, Viral infection.

Introduction

Diabetes mellitus commonly known as diabetes is a level (hyperglycemia) and presence of sugar in urine (glycosuria). It is a most serious disease affecting human being. Incidence of diabetes has increased alarmingly and it affects 18 million Indians are reported in the journal of the diabetic association of India in 1999. But, the next report 2001, India has 62.4 million diabetic and 77.2 million Prediabetic. In normal digestion body converts sugars and starches into glucose, which is carried by blood to every cell in the body. Diabetes is the result of lack of effective insulin action. Insulin is hormone secreted by the B-cells of Langerhans which are endocrine portion of the pancreas.

1. Lack of insulin may either absolute or relative.
2. Absolute insulin deficiency doesn't occur normally. It occurs only in those persons whose pancreas has been operated upon for the removal of a malignant tumour.
3. Relative insulin deficiency occurs when the quantity of insulin secreted is insufficient to metabolize the carbohydrate consumed.
4. That 6.6% of world's adult population. And at least half the number of diabetic in the world remains undiagnosed. Each year 4.6 million people die of diabetes related complications.

Thus diabetes mellitus is silent killer. Diabetes is not a disease, and which can be cured. It can only be kept under control by the persons with the help of proper Nutrition and diet management. If not kept under control, a number of complications occur. These include

1. Eye disorder leading to blindness
2. Thickening of arteries
3. Kidney dysfunction

So proper care of diabetes is essential to prevent or at least reduce incidence of complication.

A proper nutrition plan is the foundation of successful diabetes management. Control of diabetes rates depends on three factors like:

1. Diet
2. Exercise
3. Insulin

There are two types of Diabetes:

Type 1 Diabetes

IIDDM (Insulin Dependent Diabetes Mellitus) Juvenile-onset type. About 10-20% of known cases of Diabetes are of Type 1. Most of diabetic case Type 1 In this condition there is insufficient insulin supply to regulate blood glucose, because the Beta cells are destroyed. The reasons for the destruction of the Beta cells may be due to interaction of drugs, viral infection, genetic aberration.

Type II. Diabetes

NIDDM (Non-Insulin Dependent Diabetes Mellitus) 80-90% known cases are of type II. In this type of diabetes insulin receptor response is decreased while insulin production may be normal, increased or decreased. Tragic event in the family, heredity, sudden shock and excess body weight are other contributory factors. If the diet is suitably modified and regular exercise is taken, these Persons do not need insulin except during stressful day.

Blood glucose level

The normal fasting glucose level/Concentration of blood is 70-110 mg/100ml of blood, using the glucose-oxidase colorimetric Method. When the fasting level of glucose Rise above 170mg/100ml of blood. Sugar appears in urine.

Aims and Objectie of the Study

1. TO KNOW THE Nutritional awareness regarding the diet related to fruit consumption.
2. To be aware of preventing or reducing consumption of mango fruit in the season.
3. Plan for successful exercise.

1. Food intake or daily fruit consumption awareness is not proper.
2. These persons do not have knowledge about balance diet.
3. Persons, who are not aware, face lots of problems.

Methodology

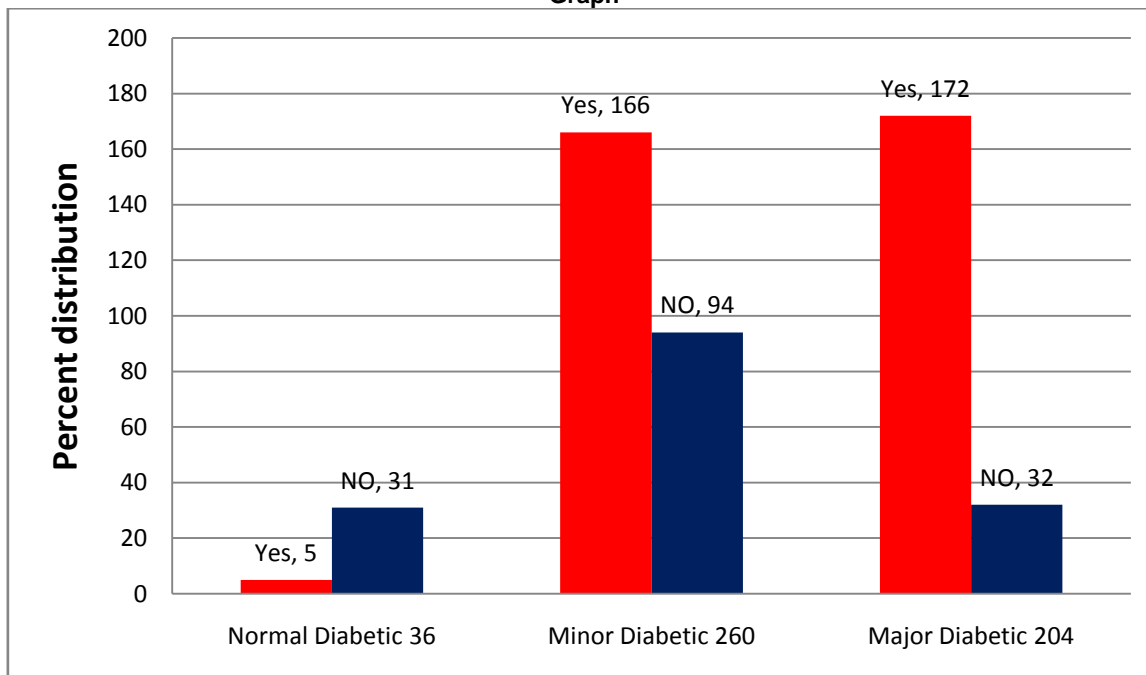
1. The study was carried out with total number of respondents (500).
2. Information was collected by Questionnaire or schedule by observation and interview method.
3. Data was collected from each family and result was tabulated and analysed by using proper statistical method to make the research work scientific.

Table showing awareness about the mango consumption in season:

Health status of the respondents	Awareness about mango consumption		
	Respondents	Yes	No
Normal diabetic	$\frac{36 \times 100}{500} = 7.2\%$	05 13.888 %	31 86.111 %
Minor diabetic	$\frac{260 \times 100}{500} = 52\%$	166 63.846 %	94 36.153 %
Major diabetic	$\frac{204 \times 100}{500} = 40.8\%$	172 84.313 %	32 15.686 %

Hypothesis

Graph



Analysis

Above table showing awareness about mango consumption in season by the respondents.

Out of 500 respondent 36 respondents are in normal diabetic condition in which 5 respondents who aware or know about the consumption of mango in diabetic condition is harmful where as 31 (86.111%)

respondents who not aware about consumption of mango and don't know that consumption of mango is harmful in diabetic condition.

260 respondents are in minor diabetic condition in which 166 (63.846%) respondent, who aware where as 94 (36.153%) who not aware about consumption of mango is harmful in diabetic condition. 204 respondents are in major diabetic group in which 172 (84.313%) respondents who aware about consumption of mango is harmful in diabetic condition where as 32 (15.686%) respondents who don't aware about consumption of mango is harmful in diabetic condition.

Finally we go $(5+166+172 = 343)$ respondents aware and $(31+94+32 = 157)$ respondents were not aware about consumption of mango. So this may cause diabetic in future.

Conclusion and Recommendation

Finding result is not satisfactory, maximum people not aware regarding with consumption of mango. It is not good sign for diabetic person. Food for diabetic person is cereals (wheat rice in moderate) ragi bajara, legumes, green leafy vegetables, some food should be avoided, sugar candies, burfi, rabddi etc. regular physical activity for the diabetic should be encouraged and incorporated into his daily routine, Aerobic exercises such as jogging, swimming, taking

long walks, are recommended. Individuals over 30 year's age or who have had diabetes for 10 years or more should have the physician's approval to begin an exercise programme.

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