#### STUDENT STUDY PROJECT ON

# A study on the impact on Millets Diet and Exercise - Prevalence of

#### Diabetes "

## **Department of Zoology**

\Dr.BRR Government College, Jadcherla

Dist:Mahabubnagar-509001



(Accredited by NAAC with "B<sup>++</sup>" Grade An ISO 9001-2015 Institution Affiliated to Palamuru University)

#### SUBMITTED BY:

P.Govardhanamma	20033006445061
P.Maheshwari	20033006445588
G.Swathi	20033006445536
L.Shashikala	20033006445561
M.Nikhitha	20033006445566

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# Dr.BRR Government College Jadcherla Mahabubnagar-509001

Academic Year 2022-23



Accredited by NAAC with "B<sup>++</sup>" Grade//an ISO 9001-2015 Institution Mahabubnagar (DIST), Telanagana State, India-509301 Affiliated to Palamuru University

> DEPT. OF ZOOLOGY pr. B.R.R. GOVI. COLLEGE Pr. B.R.R. B. C. H. B. R. L. A

PRINCIPAL

Dr.B.R.R. Govt. Degree College

Jadcherla

K.Neeraja

Assistant professor of Zoology Dr.BRR Government College Jadcherla-509301 Mahabubnagar District Telangana State, India.

Email: ncerajak844@gmail.com Mobile:9502053812

**CERTIFICATE** 

This is to certify that the project work of "A study on the impact on Millets Diet and Exercise- Prevalence of diabetes" Dr. Burgula RamaKrishna Rao Govt. Degree College,

Jadcherla" is a bonafide work done by, P.Govardhanamma, P.Maheshwari, G.Swathi, L.Shashikala, M.Nikhitha, the students of B.Sc. (BZC)T/M, VI semester students under my supervision in Zoology at the Department of Zoology Dr.BRR Government College Jadcherla during 2022-23 and the work has not been submitted in any other college or University either part or full for the award of any degree.

Place:

Date:

Signature of External examiner

Ms.K.Neeraja

Assistant Professor of Zoology

Signature of Internal examiner

## **DECLARATION**

We hereby declare that the project work entitled with a study on impact of Millets Diets and Exercise Prevalence of Dr. Burgula Ramakrishna Rao Govt. Degree College, Jadcherla Town of Mahabubnagar District, Telangana, India" is a genuine work done by us under the supervision of Ms K.Neeraja, Assistant .Professor, Department of Zoology, Dr.BRR Govt. degree College, and it has not been under the submission to any other Institute /University either in part or in full, for the award of any degree.

NAME OF THESTUDENT	CLASS	H.T.NUMBER	SIGNATURE
P.Govardhanamma	III BZC	20033006445061	P. Govordhanamma
P.Maheshwari	III BZC	20033006445588	P. Maheshwari
G.Swathi	III BZC	20033006445536	G. Swathi
L.Shashikala	III BZC	20033006445561	h. shashikala
M.Nikhitha	III BZC	20033006445566	M. Nikhiltra

#### **Abstract**

Millets (including sorghum) are known to be highly nutritious besides having a low carbon footprint and the ability to survive in high temperatures with minimal water. Millets are widely recognized as having a low Glycogenic Index (GI) helping to manage diabetes. This systematic review and meta-analyzes across the different types of millets and different forms of processing/cooking collated all evidences. Of the 100 studies that were collected globally, 23studies with 111 observations were used to analyze GI outcomes and 56 studies were used to analyze fasting, post-prandial glucose level, insulin index and HbA1c outcomes in a meta-analysis. It is evident from the descriptive statistics that the mean GI of millets is  $52.7 \pm 10.3$ , which is about 36% lower than in typical staples of milled rice (71.7  $\pm$  14.4) and refined wheat (74.2  $\pm$  14.9). The descriptive, meta and regression analyses revealed that Job's tears, fonio, foxtail, barnyard, and teff were the millets with low mean GI (<55) that are more effective (35-79%) in reducing dietary GI than the control samples. Millets with intermediate GI (55-69) are pearl millet, finger millet, kodo millet, little millet, and sorghum which have a 13-35% lower GI than the control with high GI (>69). A meta-analysis also showed that all millets had significantly (p < 0.01) lower GI than white rice, refined wheat, standard glucose or white wheat bread except little millet which had inconsistent data. Long term millet consumption lowered fasting and postprandial blood glucose levels significantly (p < 0.01) by 12 and 15%, respectively, in diabetic subjects. There was a significant reduction in HbA1c level (from 6.65  $\pm$  0.4 to 5.67  $\pm$  0.4%) among pre-diabetic individuals (p < 0.01) who consumed millets for a long period. Minimally processed millets were 30% more effective in lowering GI of a meal compared to milled rice and refined wheat. In conclusion, millets exercise can be beneficial in managing and reducing the risk of developing diabetes and could therefore be used to design appropriate meals for exercise diabetic and pre-diabetic subjects as well as for non-diabetic people for a preventive approach. people who exercised they are non diabetic.

**Keywords:** millets, jowar.bajra diabetes, glycaemic index, glycaemic response, meta-analaysis Exercise.

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#### Introduction

In recent studys It is estimated that there will be a 51% surge in diabetics globally by 2045, from 463 million in 2019 to 700 million in 2045 (1) with type 2 diabetes accounting for about 90% of the total. Eighty-seven percent of diabetes-related deaths occur in low and middle income countries where there is less diversification of staple foods. It is important to note that apart from a sedentary lifestyle and obesity, the type of food consumed plays a key role in diabetes. Main staples such as refined rice, refined wheat and maize contribute up to 80% of the energy intake in developing countries (2). Diversifying food staples and mainstreaming traditional nutritious and less glucogenic staples in the majority of developing countries is very important to manage and prevent diabetes; millets and sorghum figure first in this list of staples.

The value of a Triple Bottom Line is well-recognised in businesses and has been the stimulus for the creation of new products and impactful investments. Customising it to the Food System is the Smart Food Triple Bottom Line, defining solutions (3) that in unison are good for you (nutritious and healthy), good for the planet (environmentally sustainable) and good for the farmer (resilient). It is an approach being used to analyze the value of millets and sorghum as staples. This is the first analyses focusing on how millets and sorghum are "good for you" in terms of reducing diabetes, and comparing them to rice, wheat and maize, the "Big 3" major staple foods in Asia and Africa. Of these, polished rice, which is inherently deficient in micronutrients, provides 80% of the energy intake (4) in high rice consuming countries. Growing lifestyle diseases like type 2 diabetes make it imperative to explore dietary solutions that include nutrition and tackle major health issues. Diversifying diets by diversifying staples with the right nutritious and healthy foods can play a major role in reducing multiple health related burdens.

There are 13 types of millets available globally ( $\underline{5}$ ) which include pearl millet, finger millet, sorghum, little millet, proso millet, kodo millet, barnyard millet, brown top millet, foxtail millet, Guinea millet, Job's tears, fonio, and teff. Except for Job's tears, fonio, and teff, the other millets are widely distributed in India. Finger millet is widely found in India, China and in some Eastern and Southern African countries, whereas fonio is widely distributed in Western Africa and Job's tears in northeast India, southern and eastern Asia and southern China. On the other hand, teff is mainly found in Ethiopia ( $\underline{5}$ ). Currently, these crops are mostly grown in Africa and Asia as well as in the USA, which is the largest producer of

sorghum. Millets also occur in other parts of the world as feed and fodder or as a minor crop.

A systematic review of 19 research articles showed that millets help manage diabetes due to their high fibre, polyphenol, and antioxidant content (6). Millets were traditionally consumed in African and Asian countries and were later largely replaced by rice, wheat and maize. Considering nutrient requirements, rising non-communicable health issues like diabetes and challenges posed by climate change, it is important to popularise smart foods, i.e., foods that fulfil all criteria of being good for you, the planet and the farmer.

Many studies have demonstrated the efficacy of millets in improving glycaemic control, decreasing fasting, and post-prandial rise in blood glucose concentration  $(\underline{7},\underline{8})$ , reducing insulin index and insulin resistance and lessening glycosylated haemoglobin (HbA1c) level ( $\underline{8}$ – $\underline{12}$ ). Glycemic index (GI) is a measure of how much the carbohydrate present in the food affects the rate and extent of change in post-prandial blood glucose concentration. The general dietary strategy to enhance glycaemic control is to consume low GI food ( $\underline{13}$ ). Fasting blood glucose is generally measured following overnight fasting and post-prandial blood glucose is measured at regular intervals of up to 2 h after eating. Hyper insulinemia is associated with insulin resistance that increases the risk of type 2 diabetes ( $\underline{14}$ ). Therefore, along with post-prandial glucose concentration, it is important to measure insulin concentration in order to evaluate a food's ability to reduce insulin resistance. In addition, long term glycaemic control can be measured by HbA1c marker ( $\underline{15}$ ).

Although there are several studies on millets related to these outcomes, their information is heterogeneous. Therefore, it is important to collate scientific evidence to determine whether the studies support the glycaemic controlling ability of millets or not, including all the types and forms of processing (including cooking) they undergo, in order to serve as a dietary guide on millets. Considering the growing prevalence of diabetes among high and low socioeconomic groups in both developed and developing countries, this paper for the first time aims to undertake an in-depth systematic review and meta-analysis, simple descriptive statistics, and regression analysis of all the studies conducted to test GI, fasting and post-prandial blood glucose concentrations, insulin response and HbA1c biomarker level in millet-based diets. This includes 11 types of millets, 1 mixed millet and many forms of processing that were tested. This information will form the scientific basis for any claims about millets vis-à-vis diabetes and be useful for the scientific community, dieticians, and

nutritionists through to food processors and governments in setting policies and programs on health, nutrition and agriculture. Therefore, this study aims to address the following research question:

Does consuming millet(s)-based food help in managing and reducing the risk of developing type 2 diabetes compared to the consumption of typical staples?

#### Methods

The systematic review was conducted by: (1) collating all the relevant studies on the glucogenic effect of millets relative to other staple foods; (2) reviewing the methods used to study this; (3) conducting a regression analysis to find the effect of millets in managing diabetes and (4) conducting a meta-analysis to assess the science-based evidence on millets' ability to reduce insulin concentration, HbA1c biomarker and fasting and post-prandial blood glucose concentration and their effect on managing individuals with type 2 diabetes mellitus and pre-diabetic individuals compared to non-millet-based regular diets or other staples.

The following sections describe the methods in detail.

Study Period and Protocol

The systematic review was conducted from October 2022 to February 2023. The study protocol is registered in the Research Registry (Unique Identification Number; reviewregistry1094).

- Finger millet glycaemic index. Repeat the search by replacing finger millet with other millets in the following list: "little millet," "foxtail millet," "barnyard millet," "proso millet," "kodo millet," "teff," "fonio," "job's tears," "pearl millet," "finger millet," and "sorghum"
- 2. Common name or local name of the millets. For example: adlay (job's tears), acha (fonio), samai (little millet), and navane (foxtail millet)
- 3. Glucose response of millets. Glycaemic Load (GL) of millets
- 4. Glucose response of finger millet. Repeated the search with all the millets in the list
- Glucose lowering effect of finger millet. Repeated the search with all the millets in the list
- 6. Effect of finger millet on diabetes. Repeated the search with all the millets in the list
- 7. Effect of finger millet in managing diabetes. Repeated the search with all the millets in the list

# Millet for Diabetes: How It Affects Blood Sugar

- How Millet Affects Blood Sugar
- How to Cook With Millet

Could one humble grain help you control diabetes

Millet, an ancient cereal grain, has gained popularity for its high nutritional content and its potential to prevent diseases. Millet has become such an "it" food that it's earned the nickname, "the new quinoa."

Millet is actually a group of grasses with small seeds grown mainly in Asia and Africa. It's been around for thousands of years. Millet has a hearty nature, which helps it survive in dry climates.

Compared to other cereal grains like wheat, rice, and  $\underline{corn}$ , millet has loads of  $\underline{nutrition}$ . It's high in:

- Fiber
- Protein
- Vitamins
- Minerals
- Antioxidants

It's also gluten-free.

Millet is lower on the <u>glycemic index</u> (GI) than many other grains. That means it raises your <u>blood sugar</u> slowly and gradually instead of in quick spikes. High-fiber, low-GI foods keep blood sugar steady, <u>lower cholesterol</u>, and help you lose weight. All of these things are helpful for people with diabetes.

# Millet Affects Blood Sugar

Millet is a whole grain. That means it still has its outer layers, the bran and germ. Food companies strip away these layers to make refined grains like white flour. Because it takes your body longer to digest whole grains, they don't raise your blood sugar as quickly as refined grains do.

There are different types of millet, including:

- Foxtail
- Pearl
- Finger
- Little

There isn't much research on millet. So far, studies show that millet helps to keep <u>blood sugar levels</u> steady and prevents spikes after meals.

Most of the studies done examined the foxtail variety. In one study, people with type 2 diabetes who ate a special diet with added foxtail millet lowered their blood sugar, insulin, cholesterol, and triglyceride levels. Another study found that switching from rice to foxtail millet at breakfast led to lower blood sugar levels after the meal.

Evidence on the other types of millet isn't as clear. As a result, scientists don't know how this type of millet might affect people. Although the evidence isn't firm on all types of millet, it does suggest that this grain does raise blood sugar more slowly and steadily than white-grain products. So in theory, you may be able to control your blood sugar better if you eat millet-based foods instead of white <u>bread</u>, pasta, and rice.

#### **How to Cook With Millet**

Look for millet at local natural foods store. You'll find it on the shelf along with quinoa and other whole grains. You can buy it online, as well.

Millet has a mild, nutty flavor that makes it a versatile addition to many types of meals. To cook it, first toast it in a pan for about 3 minutes with a little bit of vegetable oil. Then add 2 1/2 cups of boiling water for each cup of millet and cook it for 25 to 30 minutes until the grains fluff up.

There are different ways you can put millet into your meals. You can:

· Make it into a porridge for breakfast.

• Substitute millet flour instead of white or wheat flour in baked goods like bread, cake, or biscuits, or in pancake mix.

• Use it to replace grains like rice, quinoa, or bulgur in recipes

## Millets for Diabetes:

Millets have enormous health benefits, but have you ever considered including these tiny grains into your diet as a diabetic?

Eating to beat diabetes is about making wise food choices than denial and deprivation.

A better way to reverse diabetes is not about compromising your favourite foods but choosing nutritionally balanced meal plan aimed at maintaining blood sugar levels within range and supporting a healthy weight.

In the current pandemic situation, people are more concerned about their health and eating habits. When it comes to diabetes, they're curious to understand many terminologies and its importance in blood sugar control.

Let's learn why millet is beneficial for people with diabetes, as well as how to include them in your routine diet.

# DIABETES EAT MILLETS

Millets are high in protein and facilitate insulin sensitivity which, in turn, makes them diabetes friendly grains.

Insulin is the hormone that the body uses to convert carbohydrates into energy. Having millets once in a while won't have much of an impact, but they should be included as part of a regular diet if you want to have long-term success in managing diabetes.

These factors make  $\underline{\text{millets}}$  an effective food for controlling blood glucose levels.

# MILLETS BENEFITS DIABETES

Studies performed on people with type 2 diabetes, examined the effect of foxtail millet. One study found that switching from rice to foxtail millet at breakfast lowered blood sugar after meals.

Due to the presence of high fibre content and antioxidants in millets, it reduces insulin spikes gradually and eases digestion for diabetics. Most importantly, grains are the major source of complex carbohydrates which provides satiety thus initiating weight loss and reduces blood sugar spikes. Moreover, it takes a longer time for the body to metabolise and break down millets due to their low glycemic load. This means that they are absorbed more slowly into the blood stream and requires less insulin.

Research published in August 2019 in the Journal of Food and Nutritional Disorders, concluded that millets may reduce both fasting and post prandial (after meal) blood sugar levels in healthy individuals as well as for type 2 diabetes.

## **ANALASIS INDEX**

The <u>glycemic index</u> (GI) is a ranking of foods based on the digestion of the carbs by their effect on blood glucose levels. The GI measures how quickly the carbohydrates in foods gets converted into glucose and how much specific food increases your blood sugar levels.

Carbohydrates from different foods lead to various blood glucose response, depending on the types of carbs consumed.

Glycemic index of foods helps to fine-tune your carb-counting while planning your meals, thus keeping blood sugar levels under control.

#### Glycemic Index of Millets:

High GI foods lead to an immediate spike in blood glucose levels while low GI foods get digested slowly to give a sustained glucose release, without causing sudden spikes in the blood sugar levels.

Low GI (< 55)	Moderate GI (55-70)			
Kodo and barnyard millets	Foxtail, little, finger, pearl millets and jowar			
Apple, pear, orange	Pineapple, papaya, mango (depends on ripeness)			

<u>Consumption of millets</u> which has low - moderate GI foods can help in the prevention and management of type 2 diabetes and reduces the associated complications.

- Focus on a balanced diet with measured amounts of low or medium glycemic foods.
- Practice food diary concept and note down the carbohydrate-rich foods you are eating often and try to swap those foods with low or medium GI foods, to maintain the blood sugar level.

Select low GI foods based on your needs and preferences.

## **DIABETES SAMPLE MENU: -**

Meal Pattern	Food Choices
morning	Dosa, idli, roti
Lunch	Rice, roti
Evening	Snacks
Dinner	Rice, roti, chapathi.

The serving sizes depend on the caloric needs of the individual and the choices may vary based on the meal timings and dietary preferences. Consult a qualified dietitian to plan your meals with low glycemic foods to manage diabetes.

#### MILLETS- DAILY MEAL

There are many ways to incorporate millet into your meals.

- 1. Serve it in the form of porridge for breakfast.
- 2. Swap rice, wheat, sooji with millets in your meals.
- Toss cooked millet with grilled vegetables or fresh salad to make it more nutritious and filling.
- 4. Prepare millet dosa varieties with different chutney accompaniments.
- Consume <u>millet noodles</u> and <u>multigrain pasta</u> instead of maida based ones

Millets are rich in insoluble fibre which adds bulk to the stools, you must concentrate on portion size too with enough hydration.

The amount of millet to be consumed depends on the sugar level of an individual, gut health sensitivity and the calorie requirements. Consult with dietician to get customized meal plan accordingly.

# HERE ARE THE BEST MILLETS FOR DIABETES

- Foxtail Millet A <u>study</u> concluded that people with type 2 diabetes who consumed a special diet enriched with foxtail millet had lower levels of blood sugar, cholesterol, and triglycerides. Another study found blood sugar levels dropped after eating foxtail millet instead of rice.
- Finger Millet Raises your blood sugar slowly and gradually rather than sudden spikes. High-fibre, low-GI foods keep blood sugar steady, lower cholesterol, and help you lose weight. Diabetes patients will benefit from these factors.
- Barnyard Millet: A recent study indicated the potential benefits of barnyard millet in the diet therapy of diabetics. It exerted positive impact on blood glucose and serum lipid levels in diabetic and non-diabetic volunteers after the dietary intervention study of 28 days.
- Finger Millet: The polyphenols of finger millets were found to be major antidiabetic and antioxidant components. Finger millet based diets have shown lower glycemic response due to high fiber content and also alpha amylase inhibition properties which are known to reduce starch digestibility and absorption
- Pearl Millet: Pearl millets are known to increase insulin sensitivity and lower the level of triglycerides. It is also very effective for controlling diabetes because of its high fiber content. It gets digested slowly and releases glucose into the blood at a slower rate as compared to other foods. This effectively helps in maintaining the blood sugar level constant in diabetes patients for a long period of time.

### MILLETS VS CONVENTIONAL GRAINS

The main difference lies in their insoluble fibre and nutritional content.

Millet is high in phosphorus, magnesium, calcium and among them finger millet is the most calcium rich source among other cereals.

They are healthier version when compared to rice/wheat because of its high dietary fibre, essential vitamins and mineral content required for the body. Therefore, aid in better digestion and have a nutritional value similar to that of fruits and vegetables.

Nutritionally, the energy value, protein and macro nutrient contents of millets is comparable and sometimes higher than conventional cereals. Research has shown that millets' phenolic properties have high antioxidant activity.

The presence of phytochemicals in millet grains has positive effect on human health by lowering the cholesterol and phytates in the body. Including more millets in the diet may improve health and decrease the risks of diseases when compared to rice.

Millets are not only rich in fibre but also protein. Rice, on the other hand, has a very minimal amount of protein content (3%) and is rich in carbohydrates. Therefore, millets are a healthier option when compared to major cereal grains.

# DIABETES FRIENDLY RECIPES

The following recipes will introduce you to millet if you've never tried it before;

# FOXTAIL MILLET PONGAL: -

#### Ingredients:

- Foxtail millet 1 cup
- Moong dal split half cup
- Green chillies 2 no.
- Pepper and cumin seeds (crushed) 2 tsp
- Curry leaves few
- Oil 1 tsp
- Salt to taste

#### Serves: 2 persons

#### Method of Preparation:

- 1. Measure 1 cup of millet and 1/2 cup of split yellow moong dal.
- 2. Soak the millet and dal in water for 10 minutes. Add four cups of water to the mixture.
- 3. Cook in a pressure cooker for 5 whistles (13-15 minutes on medium flame).
- 4. Now, temper the cooked millet in tsp of oil with green chillies, curry leaves, crushed pepper and cumin seeds. Add salt accordingly.

Mix well the mixture to blend with tempering.

Foxtail millet Pongal is ready to serve.

# PEARL MILLET IDLI: -

Photo courtesy: https://www.chitrasfoodbook.com/2017/10/kambu-idil-dosalpeari-millet-idil-bajra.html

#### Ingredients:

Pearl millet - 1 cup

Urad dal - 1/4 cup

Rice flakes - 2 tbsp

Salt

Serves: 10 idlis

#### Method of Preparation:

- 1. In separate bowls, soak the pearl millet in water for 4 hours, whereas urad dal and rice flakes for  $\frac{1}{2}$  hour.
- 2. Then, grind them separately and combine together in a container with ddnecessary salt.
- 3. The fermentation process will take about 6-7 hours. After fermentation, pour the batter into the plates and steam it for 10 minutes.
- 4. Pearl millet idlis are ready to serve with coriander/tomato chutney.

**Grainy Glimpse!** 

Due to its superior nutritional qualities, millets have moved from being the 'poor main's grain' to being considered a 'nutritious grain'. They can serve as an alternative to the conventional grains and help in maintaining healthy blood sugar levels in diabetics.

# DIETARY HABITS AND DIABETES

T	NAME	VILLAGE	WEEK	DIABETES	HEREDITI		MEDICATION	WORK
Ť	SATHYAMMA	UNDAVELLI	7	МО	ИО	YES	ИО	LABOUR
$\dagger$	SAROJAMMA	JADCHARLA	7	NO	NO	YES	МО	LABOUR
Ť	BESAMMA	JADCHARLA	5	МО	NO	YES	ИО	LABOUR
Ť	RAJESHWARI	JADCHARLA	5	NO	NO	YES	МО	SHOP
1	RAMUDU	JADCHARLA	2	NO	NO	YES	NO	SHOP
1	SRILAXMI	JADCHARLA	3	NO	NO	YES	NO	LABOUR
-	GEETHAMMA	JADCHARLA	7	NO	NO	NO	МО	LABOUR
1	RAGURAMUDU	JADCHARLA	3	NO	NO	YES	NO	LABOUR
1	SHESHAMMA	UNDAVELLI	5	NO	NO	NO	МО	LABOUR
T	RENUKAMMA	JADCHARLA	5	NO	NO	YES	ИО	HOME
1	СНПТАММА	JADCHARLA	3	NO	NO	YES	МО	AGRICULTURE
!	VENKATRAMULU	UNDAVELLI	1	NO	NO	YES	NO	SHOP
1	BHANU	JADCHARLA	4	NO	NO	NO	NO	AGRICULTURE
1	LINGAMMA	JADCHARLA	7	YES	YES	ИО	YES	LABOUR
5	CHANDRAKALA	JADCHARLA	6	YES	YES	NO	YES	JOB
5	BINDHU	BALANAGAR	6	YES	YES	YES	YES	LABOUR
7	SWAPNAMMA	JADCHARLA	4	YES	YES	YES	YES	LABOUR
3	GOPAL	BALANAGAR	6	YES	NO	NO	YES	AGRICULTURE
,	SHEKAR	UNDAVELLI	5	NO	NO	NO	NO	AGRICULTURE
,	MAHESH	JADCHAR LA	7	NO	NO	YES	NO	AGRICULTURE
1	PRASAD	MANAPOD	7	NO	NO	YES	NO	AGRICULTURE
2	MAHALAXMI	UNDAVELLI	5	NO	NO	YES	NO	AGRICULTURE
3	KEISHNAVENI	UNDAVELLI	7	YES	YES	YES	YES	LABOUR
;	RAJAMMA	UNDAVELLI	6	YES	YES	YES	YES	AGRICULTURE
5	SWATHI	UNDAVELLI	4	YES	YES	YES	YES	LABOUR
5	RAJU	UNDAVELLI	5	NO	NO	YES	NO	AUTO DRIVER
7	ANJANEYULU	UNDAVELLI	5	NO	NO	YES	NO	AUTO DRIVER
3	GAYATHRI	JADCHARLA	6	NO	NO	NO	NO	NARSING
9	LAVANYA	JADCHARLA	3	NO	NO	YES	NO	HOUSE
0	KALPANA	JADCHARLA	2	NO	NO	NO	NO	LABOUR
1	MALLESHWARI	UNDAVELLI	7	YES	YES	YES	МО	JOB
2	LAXMI	JADCHARLA	1	NO	NO	NO	NO	LABOUR
3	HARIKRISHNA	JADCHARLA	5	YES	YES	YES	NO	AUTO DRIVER
1	VENKAT	JADCHARLA	3	NO	NO	NO	NO	LABOUR
5	CHANNAMMA	BALANGAR	5	NO	NO	NO	NO	LABOUR
5	PRAVEEN REDDY	JADCHARLA	7	NO	NO	NO	NO	SHOP
7	SHIVAYA	JADCHARLA	7	YES	NO	NO	YES	LABOUR
3	THARUN	JADCHARLA	7	YES	NO	NO	YES	AGRICULTURE
9	SUMAN	JADCHARLA	7	YES	NO	NO	YES	LABOUR
0	YADHAMMA	JADCHARLA	5	YES	NO	NO	YES	LABOUR
1	MAHESWARI		3	YES	NO	YES	YES	LABOUR
2	SAGAR	JADCHARLA BALANGAR	7	YES	NO	NO	YES	AUTO DRIVER

	· · · · · · · · · · · · · · · · · · ·	UNDAVELLE		tipe				Trectie
11	RAVINGHAR	UNDAVELLI	5	VES	VES	YES	765	RUOSA)
11	ASHIRISHA	MADHINAGAR		YES	110	VES	/E5	QUOSA)
10	IEEVIIIA	BALAHGAR	0	765	110	110	715	CHIROLIAT
10	MAMAIIIA	Room to Miles to San Street Control of the S	,	VES	110	785	YES	RUCSAJ
11	SANITIIA	MAHOPAD	1	YES.	110	765	YES	AGRICULTURE
IP	GANGAMMA	HYD	/	YES	110	MO	765	301
10	MANASA	UNDAVELLI	7	AFP	VE5	VES	765	TECHAR
10	CHANDRIKA	UHDAVELLI	7	YES	119	110	YES	RUCGAI
11	\$WAIIII	UNDAVELLI	1	VES	110	110	YES	HOUSE
1)	KASHIURI	UNDAVELLI	7	VES	110	110	YES	AGRICULTURE
1	ANKIIIIA	JADCHARLA	4	110	110	110	110	RUOBAL
14	MANAMMA	MAHAHUBHAGAR	1	110	HO	lio	110	RUOSAL
19	NANSAMMA	наранишнанам	4	110	110	110	110	RUOSAL
10	NARSHIMITA	JADCHARLA	5	110	110	110	110	RUOSAL
1	VASANTIIA	JADCHARLA	1	110	110	110	no	RUOBAJ
щ	LAXMAN	JADCHARIA	4	110	110	110	110	LABOUR
14	CHENNAIAH	DONOOR	1	110	110	110	но	AGRICULTURE
(0	SHINIVASULU	MAHABUBNAGAR	7	110	110	110	но	108
11	RAMESH	MAHABUBNAGAR	4	YES	110	110	YES	XROW BAJ
1)	SUBIHA NAZREEN	MAHABUBBAGAR	7	VES	NO	110	YES	LABOUR
1	NARESH	MUDDIREDDYPALLI	6	NO	NO	YES	110	AGRICULTURE
14	BALAKRISHNA	RAYAPALLY	5	110	110	YES	110	AGRICULTURE
h	DHAWOODH ALI	RAJAPUR	7	YES	YES	но	YES	SHOP
6	LAXMAIAH	RYAPALLY	7	110	NO	YES	110	LABOUR
,,	NAGAMMA	RAYAPALLY	6	NO	NO	YES	но	LABOUR
n	RUSHNAIAH	CHOKKAMPET	4	NO	NO	YES	NO	AGRICULTURE
ų	MALLESH	CHOKKAMPET	2	NO	NO	NO	но	AGRICULTURE
0	YADHAIAH	CHOKKAMPET	3	NO	NO	YES	110	LABOUR
1	RAMULU	CHOKKAMPET	2	NO	NO	NO	NO	LABOUR
,	KRISHNA	CHOKKAMPET	5	NO	NO	NO	но	AGRICULTURE
1	RAMAIAH	RAJAPUR	4	NO	NO	NO	МО	AGRICULTURE
4	AYLSHA	RAJAPUR	6	YES	YES	NO	YES	LABOUR
5	YADHAIAH	JADCHARLA	3	NO	NO	NO	по	LABOUR
6	NARESH	JADCHARLA		YES	YES	NO	YES	JOB
7	VINKATAIAH			NO	NO	YES	МО	LOABOUR
11		CHOKKAMPET	5	NO	NO	NO	NO	AGRICULTURE
9	NARASIMIAH	CHOKKAMPET		NO	NO	по	NO	HOME
0	MAMATHA	CHOKKAMPET			YES	NO	YES	HOME
-	VENKAT RAMULU	RAJAPUR	6	YES	NO	YES	NO	
-	RAMESH	CHOKKAMPET	5	NO		NO	NO	LOABOUR
2	LAXMI	RAJAPUR	4	NO	NO			HOME
1	SAROIA	CHOKKAMPET	4	NO	NO	NO	NO	LOABOUR
1	SHAHANAZ	CHOKKAMPET	6	YES	NO	YES	YES	JOB
1	DALAIAH	RAJAPUR	4	NO	NO	NO	NO	AGRICULTURE

\* 1 \* 1

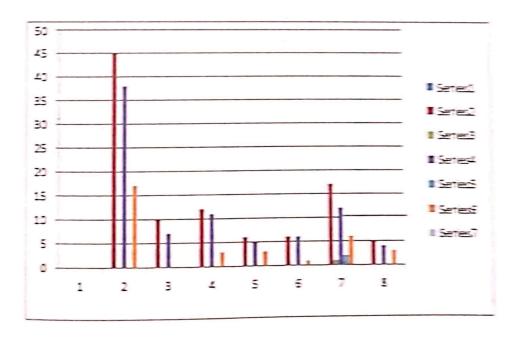
,							
					9		
							-4
. 44	4 RICE	RICE	ROTI	FARM	SORGHUM		
32		RICE	ROTI	SHOP	RAGI SORGHUM	110	14
32	RICE	RICE	ROTI	FARM	SORGHUM		
34	RAGIROTI	RICE	RICE	SHOP	RAGULU	120	14
47	IDLI ·	RICE	ROTI	FARM	SORGHUM		
54	RIGI ROTI	PEARL ROTI	RICE	FARM	RAGULU PEARL		
57	RICE	RAGI ROTI	ROTI	SHOP	RAGI SORGHUM		
72	RAGI ROTI	RICE	ROTI	SHOP	RAGULU SORGHUM	110	15
61	RAGI MALT	RICE	ROTI	FARM	RAGULU SORGHUM	148	19
54	RAGI ROTI	RICE	ROTI	FARM	PEARL MILLET SORGHUM	153	2:
44	RICE	RICE	ROTI	FARM	SORGHUM	120	15
32	IDLI	RICE	ROTI	FARM	SORGHUM	199	1
44	RICE	RICE	ROTI	FARM	SORGHUM	110	1
39	RICE	RAGI	ROTI	FARM	SORGHUM	144	1
72	RICE	RAGI	RICE	SHOP	RAGULU SORGHUM	110	1.
41	RAGI	RICE	ROTI	SHOP	RAGULU SORGHUM	141	2
32	RICE	RICE	ROTI	FARM	SORGHUM	140	2
54	PEARL ROTI	RICE	RICE	FARM	SORGHUM PEARL MILLET	150	2
43	RAGI ROTI	ROTI	RICE	SHOP	RAGULU PEARL	146	1
56	CHAPATHI	RICE	ROTI	SHOP	SORGHUM PEARL MILLET	147	2
46	RAGI JAVA	ROTI	RICE	SHOP	RAGULU	120	1
69	RAGI,IDLI	RICE	ROTI	SHOP	RAGULU SORGHUM	128	1
67	RICE	RICE	ROTI	SHOP	SORGHUM	120	1
34	RICE	RICE	PEARL ROTI	SHOP	PEARL MILLET SORGHUM		
60	RICE	ROTI	CHAPATHI	SHOP	PEARL MILLET SORGHUM		
50	RICE	RICE	ROTI	SHOP	SORGHUM		
60	RAGI JAVA	RICE	ROTI	SHOP	SORGHUM PEARL MILLET		
40	RICE	RICE	ROTI	SHOP	SORGHUM		
40	RICE	RICE	ROTI	SHOP	RAGULU SORGHUM		
55	DOSA	RICE	RICE	SHOP	SORGHUM		
53		FOXTAIL RICE	ROTI	SHOP	SORGHUM		
44	RAGI JAVA	RICE	ROTI	SHOP	SORGHUM PEARL MILLET	118	1
-	1000 101 1000 10 11 11 11 11		RICE	SHOP	RAGULU PEARL	150	2
45	RAGI JAVA	PEARL ROTI	CHAPATHI	FARM	RAGULU SORGHUM	130	-
_	ROTI	RICE			1 Al 1600)		
_	RICE	RICE	ROTI	SHOP	SORGHUM	400	
-	IDLI	RICE	CHAPATHI	SHOP	SORGHUM	102	1
-	ROTI	RICE	ROTI, RICE	FARM	SORGHUM		_
38	ROTI	RICE	ROTI,RICE	FARM	SORGHUM,RICE		
50	RICE	RICE	RICE	SHOP	RICE		
45	IDLI	RICE	CHAPATHI	FARM	RICE		
49	RICE	RICE	RICE	SHOP	RICE		
52 1	RICE	RICE	ROTI	SHOP	SORGHUM		
_	ROTI	CHEPATHI	RICE	FARM	SORGHUM		

86	GOWRAMMA	JADCHARLA	3	NO	ИО	ИО	ИО	LOABOUR
87	SATHAYANARAYANA	JADCHARLA	6	YES	NO	NO	YES	DRIWING
88	PARVATHAMMA	RAJAPUR	7	YES	NO	NO '	YES	номе
89	RAMULAMA	JADCHARLA	6	NO	NO	YES	NO	LOABOUR
90	VENKATAIAH	RAJAPUR	4	NO	NO	YES	NO	LOABOUR
91	YUSUF MD	JADCHARLA	7	YES	YES	YES	YES	DRIWING
92	SWATHI REDDY	RAJAPUR	5	YES	YES	NO	YES	номе
93	SWAPNA	JADCHARLA	7	YES	NO	YES	YES	LOABOUR
94	SANDHAMMA	RAJAPUR	6	YES	YES	YES	YES	номе
95	LALITHA	CHOKKAMPET	7	YES	YES	NO	YES	номе
96	NAZEER MIYA	JADCHARLA	6	YES	YES	NO	YES	AUTO DRIVER
97	LAVANYA	JADCHARLA	3	NO	NO	YES	NO	JOB
98	ANJAMMA	JADCHARLA	2	NO	NO	YES	NO	LOABOUR
99	JYOTHI	JADCHARLA	1	NO	NO	NO	NO	LOABOUR
00	KURMAIAH	CHOKKAMPET	4	NO	NO	NO	NO	AGRICULTURE

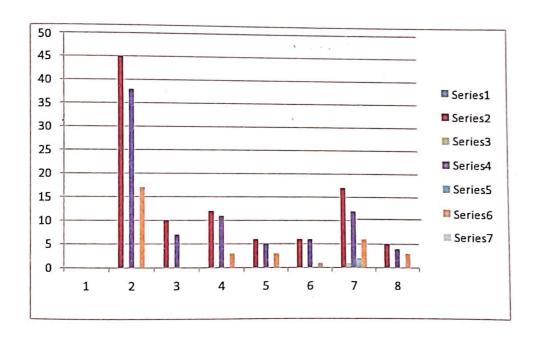
AGE	TIFFIN	LUNCH	DINNER	PLACE	WHAT IS COLLECTED	PERCENTAG	E
44	RAGI ROTI	RICE	ROTI	SHOP	RAGI SORGHUM		
42	ROTI	RICE	СНАРАТНІ	FARM	RAGI SORGHUM		
42	RICE	RAGI MALT	ROTI	FARM	RAGI SORGHUM		
72	RICE	RTI	RICE	FARM	PEARL MILLET SORGHUM		
72	RAGI ROTI	RICE	PEARL ROTI	FARM	PEARL MILLET SORGHUM		
52	RAGI JAVA	RICE	SORGHUM ROTI	FARM	RAGI SORGHUM		
44	RAGI ROTI	RICE	SORGHUM ROTI	SHOP	RAGI SORGHUM		
72	ROTI	RICE	RICE	FARM	SORGHUM		
52	RAGI ROTI	FOXTAIL MILLET	ROTI	FARM	SORGHUM	118	182
34	IDLI	RICE	ROTI	FARM	SORGHUM	118	150
47	CHAPATHI	RICE	ROTI	FARM	SORGHUM	124	148
34	RAGI JAVA	RICE	ROTI	FARM	RAGI SORGHUM	148	167
77	ROTI	FOXTAIL RICE	RICE	MARKET	RAGIULU	120	160
79	RICE	ROTI	RICE	FARM	SORGHUM		
62	RAGI ROTI	RICE	ROTI	FARM	RAGI SORGHUM		
75	RAGI MALT	RICE	ROTI	SHOP	RAGI SORGHUM		
43	RAGI ROTI	RICE	CHAPATHI	SHOP	RAGI SORGHUM		
54	IDLI	RICE	ROTI	SHOP	SORGHUM	160	236
38	DOSA	RICE	ROTI	FARM	RAGULU	147	206
70	RICE	ROTI	CHAPATHI	FARM	SORGHUM	230	407
32	RICE	RICE	ROTI	FARM	SORGHUM		
47	RICE	RICE	ROTI	MARKET	SORGHUM		
44	DOSA	RICE	CHAPATHI	SHOP	RAGI SORGHUM		
62	RAGIROTI	RICE	ROTI	FARM	RAGI SORGHUM		

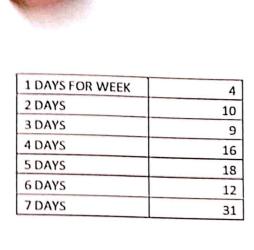
40	RICE	RICE	RICE	FARM	RICE		
45	IDLI	RICE	ROTI	SHOP	SOUGHUM ,RICE	129	137
44	RICE	RICR	ROTI	FARM	SOUGHUM ,RICE	-	
62	DOSA	BROWN RICE	ROTI	,		127	214
45	RICE	RICE	RICE	SHOP	RICE	,	
40	ROTI	RICE	ROTI	FARM	SOUGHUM ,RICE		
56	RAGI JAVA	RICE	ROTI	FARM	RAGI SORGHUM		
50	CHAPATHI	RICE	ROTI	FARM	RAGI SORGHUM	134	219
42	RICE	RICE	ROTI	SHOP	SOUGHUM ,RICE	1	
40	ROTI,RICE	RICE	CHEPATHI, RICE	FARM	SOUGHUM ,RICE		
38	RAGI JAVA	RICE	ROTI	SHOP	SOUGHUM		
40	DOSA	FOXTAIL RICE	RICE	SHOP	FOXTAIL MILLET	301	160
44	RAGI JAVA	RICE	ROTI	FARM			
40	ROTI	RICE	RAGI ROTI	FARM	SOUGHUM		
52	IDLI	RICE	ROTI	SHOP	SOUGHUM	137	224
60	DOSA,IDLI	RICE	CHEPATHI,ROTI	FARM	SOUGHUM ,RICE	129	221
35	RICE	RICE	RICE	SHOP	RICE	1	
46	RICE	RICE	ROTI	SHOP	SOUGHUM RICE		
58	IDLI	RICE	ROTI	SHOP	SOUGHUM	114	134
32	DOSA	RICE	ROTI,CHAPATHI	FARM	SOUGHUM,RICE	110	160
29	RICE	RICE	ROTI	SHOP	SOUGHUM,RICE	104	160
56	ROTI	RICE	СНАРАТНІ	SHOP	SOUMGHUM, RICE	126	210
42	RAGI ROTI,	RISE	BROWN RICE	FARM	RAGI,BROWN RICE	129	224
60	RAGI MALT	RICE	ROTI	SHOP	RAGULU,SOUGHUM	117	136
35	DOSA	RICE	CHAPATHI,ROTI	SHOP	SOUGHUM,RICE	11/	130
45	ROTI	RICE	RICE	FARM	SOUGHUM,RICE		
44	RICE	RICE	RICE	SHOP	RICE	-	
66	RAGI ROTI	RICE	SORGHUM ROTI	FARM	RAGULU SORGHUM		-

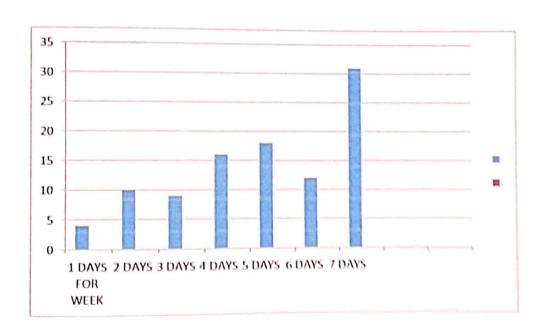
WORK	शŒ	PEARL WILLETS		SOUS-IUW	FORTAL	Ŧ,	لللاقة
LO48OUR	45		I	32	1		1 20
JOE	10		I	7			
HOUSE	12			11			3
5-10P	5		1	5			3
DRIWING	5	¥		E			=
AGRICULTURE	17		1	12	1	2	5
TAILARING	5		Į.	1	4		3



RICE	PEARL MILLATS	SOUGHUM	FOXTAIL MILLAT	RA	GULU
45		38			17
10	y y	7			
12		11			3
6					3
6					1
17	1			2	
5				2	6
	45 10 12 6 6 17	RICE MILLATS 45 10 12 6 6 17	RICE       MILLATS       SOUGHUM         45       38         10       7         12       11         6       5         6       6         17       1	RICE MILLATS SOUGHUM MILLAT  45	RICE MILLATS SOUGHUM MILLAT RA  45











Cell 9030132030 surediagnostic21@gmail.com

Patient Name : Mrs.SUSHEELA

Ref. No.

Ref. Doctor

Age/Gender : Y rs/FEMALE

: 23033772 : SELF

Sample Type : WB-EDTA

Registered On : 27-Mar-2023 09:02:20 AM Collected On : 27-Mar-2023 09:02:20 AM Reporting On : 27-Mar-2023 12:29:15 PM

Test Name

**Observed Values** 

Biological Reference Intervals

DEPARTMENT OF BIOCHEMISTRY GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

H b.A1C

: 9.2

%

Units

NON DIABETIC: 4 - 7% GOOD CONTROL: 7 - 8%

FAIR CONTROL: 8 - 10% POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

: 217.3

mg/dl

90-120 - EXCELLENT CONTROL

121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

has head Current Art Cinca França (Newsory Discost "Discost Francialy Americand Report Quality in Health Service"

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell. 9030132030 surediagnostic21@gmail.com

Patient Name : Mr.SURESH

Ref. No.

Age/Gender : 48 Yrs/MALE Ref. No. : 23043988

Sample Type : SERUM Registered On : 15-Apr-2023 09:08:20 AM

Collected On : 15-Apr-2023 09:08:20 AM Reporting On : 15-Apr-2023 12:04:32 PM

Ref. Doctor : SELF		Collected On Reporting On	: 15-Apr-2023 09:08:20 AM : 15-Apr-2023 12:04:32 PM
Test Name	Observed Values <u>DEPARTMENT OF BIO</u> FASTING & POST LUNC	Units CHEMISTRY H(FBS & PLBS)	Biological Reference Intervals
FASTING BLOOD SUGAR	: 129	mg/dl	70 - 110
FASTING URINE SUGAR	: N/G		
POST-LUNCH BLOOD SUGAR	: 235	mg/dl	110 - 160
POST-LUNCH URINE SUGAR	: N/G		

Method: GOD-POD

Lab Incharge



Cell 9030132030 surediagnostic21@gmail.com

Patient Name : Mr.SURESH

Age/Gender Ref. No.

Ref. Doctor : SELF

: 48 Yrs/MALE

: 23043988

Sample Type : WB-EDTA

Registered On : 15-Apr-2023 09:08:20 AM Collected On : 15-Apr-2023 09:08:20 AM

Reporting On

: 15-Apr-2023 12:05:30 PM

**Test Name** 

**Observed Values** Units DEPARTMENT OF BIOCHEMISTRY

Biological Reference Intervals

GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

Hb.A1C

: 7.0

%

NON DIABETIC: 4 - 7%

GOOD CONTROL: 7-8% FAIR CONTROL: 8 - 10% POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

: 154.2

mg/dl

90-120 - EXCELLENT CONTROL

121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

Note Pears Currente With Direct Francis (Necessary Discuss That is an Engineery Americated Report "Quality in Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell. 9030132030 surediagnostic21@gmail.com

Patlent Name : Mr.SHAAM SUNDAR

Age/Gender: 72 Yrs/MALE Ref. No.: 23033776

Ref. Doctor : SELF

Sample Type : SERUM

Registered On : 27-Mar-2023 10:43:11 AM Collected On : 27-Mar-2023 10:43:11 AM Reporting On : 27-Mar-2023 12:29:57 PM

Test Name

Observed Values

Units

Biological Reference Intervals

DEPARTMENT OF BIOCHEMISTRY

FASTING & POST LUNCH(FBS & PLBS)

**FASTING BLOOD SUGAR** 

: 230

mg/dl

70 - 110

**FASTING URINE SUGAR** 

: N/G

POST-LUNCH BLOOD SUGAR

: 407

mg/dl

110 - 160

POST-LUNCH URINE SUGAR

: N/G

Method: GOD-POD

Lab Incharge



Cell. 9030132030 surediagnostic21@gmail.com

Patient Name : Mr.SHAAM SUNDAR

Age/Gender : 72 Yrs/MALE : 23033776 Ref. No.

Ref. Doctor : SELF Sample Type

: WB-EDTA

Registered On : 27-Mar-2023 10:43:11 AM

Reporting On

Collected On : 27-Mar-2023 10:43:11 AM : 27-Mar-2023 12:30:12 PM

**Test Name** 

**Observed Values** 

Units

Biological Reference Intervals

**DEPARTMENT OF BIOCHEMISTRY** GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

H b.A1C

: 14.1

%

NON DIABETIC: 4 - 7%

GOOD CONTROL: 7 - 8% FAIR CONTROL: 8 - 10% POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

: 358.0

mg/dl

90-120 - EXCELLENT CONTROL

121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

Note Pease Consider We Conce Frongs (\*Leosary Dacuss That is a Economical Americans Report Quality in Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell: 9030132030 surediagnostic21@gmail.com

Patient Name : Mrs.SABIHA NAZNEEN

Age/Gender : 45 Yrs/FEMALE Ref. No. : 23033521 Ref. Doctor : KALEEM, M.D

Sample Type : WB-EDTA

Registered On : 05-Mar-2023 11:04:17 AM

Collected On : 05-Mar-2023 11:04:17 AM Reporting On : 05-Mar-2023 11:39:59 AM

Test Name

Observed Values Units **Biological Reference Intervals** 

**DEPARTMENT OF BIOCHEMISTRY** GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

Hb.A1C

: 14.3

NON DIABETIC: 4 - 7% GOOD CONTROL: 7 - 8% FAIR CONTROL: 8-10%

POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

: 363.7

mg/dl

90-120 - EXCELLENT CONTROL 121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

Yold Peace Correled With Concer Frances if Necessary Discuss This is in Electronically Authenticated Report\*

'Quality in Health Service'

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell. 9030132030 surediagnostic21@gmail.com

Patient Name : Mrs.SABIHA NAZNEEN

Ref. No.

Age/Gender : 45 Yrs/FEMALE

Ref. Doctor

: 23033521

: KALEEM, M.D

Sample Type : SERUM

Registered On : 05-Mar-2023 11:04:17 AM

Reporting On

Collected On : 05-Mar-2023 11:04:17 AM : 05-Mar-2023 01:09:50 PM

**Test Name** 

**Observed Values** Units

Biological Reference Intervals

DEPARTMENT OF BIOCHEMISTRY

FASTING & POST LUNCH(FBS & PLBS)

**FASTING BLOOD SUGAR** 

: 150

mg/dl

70 - 110

**FASTING URINE SUGAR** 

: N/G

POST-LUNCH BLOOD SUGAR

: 236

mg/dl

110 - 160

POST-LUNCH URINE SUGAR

: N/G

Method: GOD-POD

Lab Incharge

Patient Name : Mrs.SADIYA

ApelGennier : 76 Yrs FEMALE Ref. No. : 25353730

Ref. No. : 2333733 Ref. Dector : ASMA ANUM\_MO(AM)

Sample Type : SERUM

Registered On : 23-Mar-2023 09:24:59 AM
Collected On : 23-Mar-2023 09:24:59 AM
Reporting On : 23-Mar-2023 12:22:15 PM

#### DEPARTMENT OF SIGCHEMISTRY FLISTING & POST LUNCH (FESS & PLES)

Test Name	1	Observed Values	Units	Stological Reference Intervals	
FASTING SLOOD SUGAR	ž	112	mg/dl	70-110	
FASTING URINE SUIGAR	2	NIL			
POST-LUNCH BLOOD SLIGAR	2	175	mg/di	110 - 150	
POST-LUNCH URINE SUGAR	ž,	NIIL			

Method: GOD-POD

Note: Please Correlate Clinically It necessary kinds discuss.



Cell. 9030132030 surediagnostic21@gmail.com

Age/Gender Ref. No.

Ref. Doctor

Patient Name : Mr. RAMESH : 44 Yrs/MALE : 23044008

: SELF

Sample Type

: SERUM

Registered On : 17-Apr-2023 11:29:46 AM Collected On : 17-Apr-2023 11:29:46 AM

Reporting On

: 17-Apr-2023 02:46:35 PM

**Test Name** 

**Observed Values** Units DEPARTMENT OF BIOCHEMISTRY **EASTING & POST LUNCH(FBS & PLBS)** 

**Biological Reference Intervals** 

FASTING BLOOD SUGAR

: 118

mg/dl

70 - 110

FASTING URINE SUGAR

: N/G

POST-LUNCH BLOOD SUGAR

: 182

mg/dl

110 - 160

POST-LUNCH URINE SUGAR

: N/G

Method : GOD-POD

Paus Sureme Mr Since Fronts Howsey Discuss
To a in Entroncely Attended Report
Quality in Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell: 9030132030 surediagnostic21@gmail.com

Patlent Name : Mr.DR PAVAN RAJ PUROHIT

Age/Gender : 43 Yrs/MALE

: 23043894

Ref. No. : SELF Ref. Doctor

Sample Type : SERUM

Registered On : 06-Apr-2023 08:32:49 AM Collected On : 06-Apr-2023 08:32:49 AM Reporting On : 06-Apr-2023 11:53:31 AM

Test Name **Observed Values** 

Units

Biological Reference Intervals

DEPARTMENT OF BIOCHEMISTRY FASTING & POST LUNCH(FBS & PLBS)

FASTING BLOOD SUGAR

: 128

mg/dl

70 - 110

FASTING URINE SUGAR

: N/G

POST-LUNCH BLOOD SUGAR

: 192

mg/dl

110 - 160

POST-LUNCH URINE SUGAR

: N/G

Method: GOD-POD

Lab Incharge

tos Peux Dresse No Dress France (Newsony Datus "No Les Secronos) Americans Faces" Quality in Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.



Cell 9030132030 surediagnostic21@gmail.com

Patient Name : Mr. VUAY KUMAR

Age/Gender Ref. No.

54 YEL/MALE

Ref. Doctor

23033823

SELF

Sample Type

WB-EDTA

Collected On

Registered On : 31-Mar-2023 07:10:02 AM

Reporting On

31-Mar-2023 07:10:02 AM 31-Mar-2023 10:57:40 AM

Test Name

Observed Values DEPARTMENT OF BIOCHEMISTRY

Units Biological Reference Intervals

GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

H b.A1C

: 11.5

NON DIABETIC: 4 - 7%

GOOD CONTROL: 7 - 8% FAIR CONTROL: 8 - 10% POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

283.4

mg/dl

90-120 - EXCELLENT CONTROL

121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

No. Asser Direct and Drick Foliage Places and Decision This is a Districtory American Report. QUESTY IN Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBHAGAR.



Cell. 9030132030 surediagnostic21@gmail.com

Patient Name : Mr.DR PAVAN RAJ PUROHIT

: 43 Yrs/MALE Age/Gender : 23043894 Ref. No. : SELF

Sample Type : WB-EDTA

Registered On : 06-Apr-2023 08:32:49 AM Collected On : 06-Apr-2023 08:32:49 AM Reporting On : 06-Apr-2023 11:13:49 AM

**Test Name** 

**Observed Values** 

Units

Biological Reference Intervals

DEPARTMENT OF BIOCHEMISTRY GLYCOSYLATED HAEMOGLOBIN(GHBA1C)

Hb.A1C

Ref. Doctor

: 9.3

%

NON DIABETIC: 4 - 7% GOOD CONTROL: 7-8% FAIR CONTROL: 8 - 10% POOR CONTROL ABOVE 10%

MEAN BLOOD GLUCOSE(MBG)

: 220.2

mg/dl

90-120 - EXCELLENT CONTROL 121-150 - GOOD CONTROL 151-180 - AVERAGE CONTROL 181-210 - ACTION SUGGESTED

Method: PROVISIO NEPHLOMETRY

Lab Incharge

You Feel Control of Drice Frongs thecessory Discuss
2.3 of Sectionally Americans Report

Quality in Health Service

Bio-Chemistry, Haemotology, Microbiology, Pathology, Serology, Hormons & All Lab Investigation Facilities

Opp. Ravi Children's Hospital, Near Canara Bank, New Town, MAHABUBNAGAR.

: MRS. SANDHAMMA Name

Age/Sex : 56 yrs/F

Referred by : DR. RAFEEQ SAHAB

Registration No : 3102

Sample collection on: 07th Apr,2023

Reported on

: 07th Apr.2023

SAMPLE: SERUM & Urine METHOD: Glucose GOD, POD Method

## **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

126 mg/dl

CORRESPONDING URINE SUGAR :

Nil

POST LUNCH BLOOD SUGAR

: 210 ing/dl 110 1c0 mg di

CORRESPONDING URINE SUGAR

Green Colour (0.5%)

MR. MD. YUSUF

Age/Sex :58 yrs/M

Referred by : DR. RAFEEQ SAHAB

Registration No

: 3106

Sample collection on : 08th Apr.,2023

Reported on

: 084 Apr,2023

SAMPLE SERUM A Urine MITHOD Glucose GOD POD Method

# DIVISION OF BIOCHEMISTRY

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

1. 114 mg/dl

60 120 mg/dl

CORRESPONDING URINE SUGAR 1

POST LUNCH BLOOD SUGAR : 144 mg/db 110 (e60 mg/db

CORRESPONDING URING SUGAR . No.

Name : MRS. AYESHA

Age/Sex : 45 yrs/F

Referred by: DR.RAFEEQ SAHAB

Registration No : 3163

Sample collection on : 21st Apr, 2023

Reported on

: 21st Apr,2023

Sample: Serum Method Erba Semi Auto Analyzer Method

#### BIO-CHEMISTRY REPORT

INVESTIGATION

RESULT UNITS

REFERENCE RANGE

Random Blood Sugar

: 129

mg/dl 80 to 160

Corresponding Urine Sugar & Nil

Name

: MR. NARENDHAR

Age/Sex : 62 yrs/M

Referred by : DR. RAFFEQ SAHAB

Registration No

: 3156

Sample collection on: 20th Apr, 2023

Reported on

: 20th Apr.2023

SAMPLE SERUM & Urine METHOD: Glucuse GOD POD Method

#### **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

127 mg/dl

CORRESPONDING URINE SUGAR :

.60. 120 mg/dl

POST LÜNCH BLOOD SÜGÄR :

211 mg/d) 110 160 mg/d)

CORRESPONDING URBAL SUGAR Green Colour (0.5%)

Name : MRS. LALITHA Age/Sex : 42 yrs/F Referred by : DR. RAFEEQ SAHAB

Registration No : 3101 Sample collection on : 074 Apr.2023 Reported on : 07th Apr.2023

SAMPLE SERUM & Urine METHOD : Glucuse GOD, POD Method

## **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR : 129 mg/dl

60 120 mg/d!

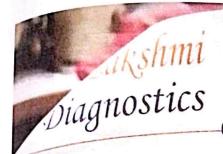
CORRESPONDING URINE SUGAR : Green Colour (0.5%)

POST LUNCH BLOOD SUGAR a 224 mg/dl

110 - 160 mg/dl

CORRESPONDING URINE SUGAR

Yellow Colour (1.0%)



Plot No. 21, Nagole X Roads, R.R. Dist. Ph: 40178716,24220585, 94403 82585, 93934

E-mail: sldnagole@gmail.com

#### REPORT

: Mrs. SWATHI REDDY

: 32 Y I Female

: 0700

ert No

: Dr.PAVAN KUMAR REDDY

Bill No

Nationality

Registered Date Reported Date

Report Printed on

: INDIA

: 17-Apr-2023 08:36:00 A

: 18-Apr-2023 05:55:41 F

: 17-Apr-2023 11:36:53 /

est Description

tered By

RESULT

157.6 mg/d1 f

BIOCHEMISTRY

Reference Range

lacose Fasting

gial COO POD

nne Sugar Fasting

sing Blood Sugar more than 126 mg/dl on more than one occasion can indicate Diabetes Mellitus. 220.4 mg/dl †

acose Post Prandial

nd GOD PCD-Engress

ne Sugar Post Prandial

ostprandial glucose reading of 160-199 mg/dl indicates prediabetes.

osprandial reading over 200 mg/dl indicates diabetes.

60 - 110

Name : MR. DHAWOODH ALI

Age/Sex :50 yrs/M

Referred by: SELF

Registration No : 3161

Sample collection on : 21× Apr, 2023

Reported on

:21× Apr,2023

SAMPLE: SERUM & Urine METHOD: Glucose GOD, POD Method

# **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

102 mg/dl

60 - 120 mg/dL

CORRESPONDING URINE SUGAR:

Not Given

POST LUNCH BLOOD SUGAR

134 mg/dl

110 - 160 mg/dl

CORRESPONDIND URINE SUGAR

Not Given

Name

: MRS. SHAHANAZ

Age/Sex

:40 yrs/F

Referred by: DR.RAFEEQ SAHAB

Registration No

Sample collection on : 10th Apr,2023

Reported on

: 10th Apr,2023

Sample: Serum

Method Erba Semi Auto Analyzer Method

#### **BIO-CHEMISTRY REPORT**

INVESTIGATION

RESULT

UNITS

REFERENCE RANGE

Random Blood Sugar

: 310

mg/dl

80 to 160

Corresponding Urine Sugar

Not Given

Name : MR. NAZEER MIYA

Age/Sex : 60 yrs/M

Referred by : DR. MOINUDDIN GARU

Registration No

: 3103

Sample collection on: 07th Apr, 2023

Reported on 107th Apr,2023

SAMPLE: SERUM & Urine METHOD : Glucose GOD, POD Method

## **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

117 mg/dl

 $60 - 120 \, \text{mg/dl}$ 

CORRESPONDING URINE SUGAR :

Nil

POST LUNCH BLOOD SUGAR

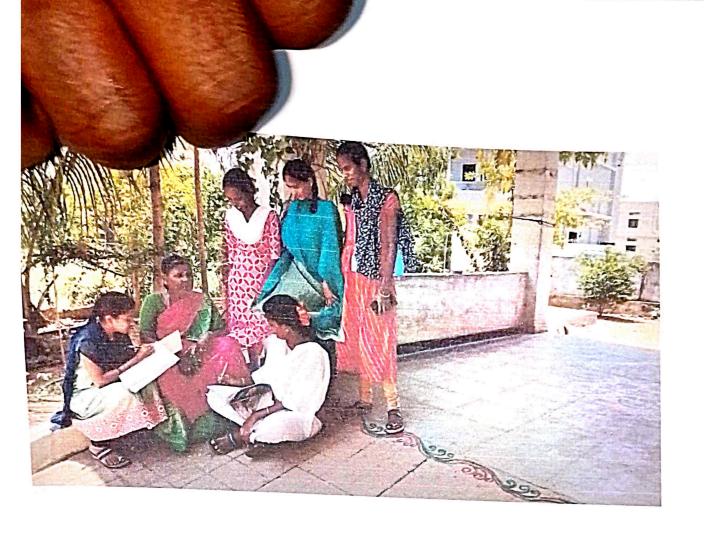
136 mg/dl

 $110 - 160 \, \text{mg/dl}$ 

CORRESPONDIND URINE SUGAR









Name

: MR. SATHYA NARAYANA

Age/Sex : 52 yrs/M

Referred by : DR. PUSHPA GARU

Registration No

: 3126

Sample collection on: 12th Apr,2023

Reported on

: 12th Apr,2023

SAMPLE: SERUM & Urine

METHOD: Glucose GOD, POD Method

## **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

137 mg/dl

60 - 120 mg/dl.

CORRESPONDING URINE SUGAR :

Green Colour(0.5%)

POST LUNCH BLOOD SUGAR

224 mg/dl

110 - 160 mg/dl

CORRESPONDIND URINE SUGAR

Yellow Colour (1.0%)

Name : MRS. PARVATHAMMA

Age/Sex : 60 yrs/F

Referred by : SELF

Registration No

: 3107

Sample collection on: 08th Apr,2023

Reported on

:08th Apr,2023

SAMPLE: SERUM & Urine METHOD: Glucose GOD, POD Method

## **DIVISION OF BIOCHEMISTRY**

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

129 mg/dl

60 - 120 mg/dl

CORRESPONDING URINE SUGAR :

Green Colour(0.5%)

POST LUNCH BLOOD SUGAR

221 mg/dl

110 - 160 mg/dl

CORRESPONDING URINE SUGAR

Yellow Colour (1.0%)

: MRS. SWAPNA

Age/Sex

: 29 yrs / F

Referred by: DR.RAFEEQ SAHAB

Registration No : 3105

Sample collection on: 07th Apr.2023

Reported on

: 07th Apr. 2023

Sample: Serum

Method Erbs Semi Auto Analyzer Method

#### BIO-CHEMISTRY REPORT

INVESTIGATION

RESULT UNITS

REFERENCE RANGE

Random Blood Sugar

104

mg/di 50 to 160

Corresponding United Sugar

NA

Name

MR. VENKAT RAMANAIAII Age/Sex 150 yrs/M

Referred by : DR. BALA SRINIVAS GARII

Registration No

1 3129

Sample collection on: 13\* Apr,2023

Reported on

:13\* Apr,2023

SAMPLE SERUM & Urine METHOD . Glucese GOD POD Method

# DIVISION OF BIOCHEMISTRY

INVESTIGATION

RESULT

REFERENCE RANGE

FASTING BLOOD SUGAR

134 - mg/dt

60 120 mg/dl

CORRESPONDING URINE SUGAR +

Green Colour(0.5%)

POST LUNCH BLOOD SUGAR

219 mg/dl

110 160 mg/dl

CORRESPONDING URINE SUGAR

Yellow Colour (1.0%)



Cell: 9030132030 surediagnostic21@gmail.com

Patient Name : Mrs.UMA DEVI

Age/Gender

: 42 Yrs/FEMALE

Ref. No. Ref. Doctor : 23043992 : SELF

Sample Type : SERUM

Registered On : 15-Apr-2023 09:27:05 AM

Collected On

: 15-Apr-2023 09:27:05 AM

Reporting On

: 16-Apr-2023 11:29:14 AM

**Test Name** 

**Observed Values** 

Units

**Biological Reference Intervals** 

DEPARTMENT OF BIOCHEMISTRY FASTING & POST LUNCH(FBS & PLBS)

FASTING BLOOD SUGAR

: 124

mg/dl

70 - 110

**FASTING URINE SUGAR** 

N/G

POST-LUNCH BLOOD SUGAR

: 148

mg/dl

110 - 160

POST-LUNCH URINE SUGAR

: N/G

Method: GOD-POD

#### **RESULT ANALYSIS**

Those who go to work, 13 have diabetes. Among those who go to work, even though they ar e taking sorghum small grains, they have diabetes because of yheir hard work

Physical acitivity, they have diabetes. Like wise they exerted themselves but a greater percentage rested they have diabetes.

Sugar 7+5=12,100 is changed among those staying at home 7 has sugar with those staying at home. Ereryone is also taking sancks but eating too much rice also gave them dibetes. Dud to not eating properly. Atese suger is there

There is suger their sorghum, ragu even though they are eating rice they have suger. They got suger because of sitting too much even though some or suffeing from diabetes. After millets dite also because take of exercise.

Only 38 of the 100 pepole will surveyed had diabetis among 100 of simple 13 are known diabetis 7 members among those who work.

Among those who are at home are also 7 are suffering from diabetis due to lack of physical exertion.

Among the business people are there is only 1 sugger among the tradrrs diabetis due lacle physical excertio

Among the drivers they dont mainlaem those who drive is a total pepole dite of limitings of lack of physical aetivity. Beacuse of few are suffering from diabetis the people work at fields. They are physically active because of this only are is diabets among 6 members of people cardio excessise many are suffering personnel due to lack.

# CONCLUSION

In our survey majority people are latring millats is thir diet in some people millet diet profoundly seduce the blood sugar levels but in few people millet diet does not show an y

 $_{ ext{Diabetes}}$  is a life style disease we teke proper dite do physical activity and stress free lifeb we  $_{ ext{have}}$  to do yoga meditation also keeps diabetes at bay

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