

TO STUDY THE PREVALENCE OF TYPE II DIABETES MELLITUS IN RURAL KARNATAKA-SURVEY

Dissertation submitted by

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Under the Guidance of

Ms. PADMASHRI,



Towards the partial fulfilment of

**MASTER OF SCIENCE IN YOGA THERAPY
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**SWAMI VIVEKANANDA YOGA ANUSANDHANA
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CERTIFICATE

This is to certify that Priya joshi who has been given MSc registration with effect from August 1, 2016 by Swami Vivekananda Yoga Anusandhana Samsthana, Deemed to be University, has successfully completed the required training in acquiring the relevant background knowledge in Yoga Therapy and has completed the MSc course of 2 years to submit this Research project entitled “TO STUDY THE PREVALENCE OF TYPE II DIABETES MELLITUS IN RURAL KARNATAKA-SURVEY” as per the regulations of the University.

PADMASRI, (M.sc)

DECLARATION

I, hereby declare that the study was conducted by me at Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA), under the guidance of Ms..Padmasri S-VYASA University, Bangalore.

I also declare that the subject matter of the study entitled “TO STUDY THE PREVALENCE OF TYPE II DIABETES MELLITUS IN RURAL KARNATAKA (Araneru, Sharjapur, Bangalore) -SURVEY” has not formed previously the basis of the award of any degree, diploma or similar titles.

DATE:

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PLACE: Bangalore

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Date:

Name: PRIYA JOSHI.

Place: Bangalore

**STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO
TRANSLITERATE SANSKRIT WORDS**

a	=	अ	na	=	न	pa	=	प
ā	=	आ	ca	=	च	pha	=	फ
i	=	इ	cha	=	छ	ba	=	ब
ī	=	ई	ja	=	ज	bha	=	भ
u	=	उ	jha	=	झ	ma	=	म
ū	=	ऊ	ñ	=	ञ	ya	=	य
ṛ	=	ऋ	ṭa	=	ट	ra	=	र
ṝ	=	ॠ	ṭha	=	ठ	la	=	ल
e	=	ए	ḍa	=	ड	va	=	व
ai	=	ऐ	ḍha	=	ढ	śa	=	श
o	=	ओ	ṇa	=	ण	ṣa	=	ष
au	=	औ	ta	=	त	sa	=	स
m̄	=	अं	tha	=	थ	ha	=	ह
ḥ	=	अः	da	=	द	kṣa	=	क्ष
ka	=	क	dha	=	ध	tra	=	त्र
kha	=	ख	na	=	न	jña	=	ज्
						ga	=	ग
						gha	=	घ

ABSTRACT

Background and Introduction: Diabetes Mellitus is developing as a chief health problem owing to its serious difficulties. It is important to assess the various factors contributing to the incidence of the disease so that by limiting these factors the advancement of the disease in patients can be controlled. Hence, the present study was commenced to determine the risk factors for T2DM amongst adults aged above 20 years in rural population of North Karnataka.

Methods: We conducted a cross-sectional community based survey, among persons of either sex, aged 20 years and above. Study variables included, socio-demographic characteristics, physical activity, and anthropometric. Starting from the first house onwards all the houses within the lane were covered continuously, keeping towards the left. This process was continued until the whole village is covered. Written informed approval was obtained from all the subjects. During house visits, data was collected by personal face to face discussion using a pre-designed questionnaire. The questionnaire included details on socio-demographic variables, anthropometric measurements and physical activity position.

Results: There were 212 men and 228 women. There were 48.18% of men and 51.82% women participants. 19.1% of the people are in the age group of 20-40 years and 35.9% of the people are in the age group of 41-60 years, 4.9% of the people are in the age group of 61-90 years, and 4.5% of the people are in the age group of 61-90 years. The overall prevalence of diabetes was 5.90%, and 13.29% of the people are in High Risk for Diabetes, 51.69% of the people are in moderate risk for diabetes and 35.02% of the people are in low risk diabetes.

Out of the 26 diabetes 73% of them are of the age range 40-60years, 11.5% are of age range 20-40years and 15% are of age above 60 years and above. Out of the 26 diabetes 38.5% have family history.

Among the 167 person who have medium risk for DM, 9.5% have family history, out of the 167 medium risk persons 26% people are of age range from 40-60. And 63% people are of age range from 20-40years and 11% people of age range above 60.

Conclusion: The prevalence of diabetes is 5.90%. As per the IDRL score 13.29% of the people are in High Risk for Diabetes, 51.69% of the people are Medium Risk for diabetes.

Maximum (i.e. 2/3rd of) diabetics are of age range 40-60 years and almost 2/5 of the diabetics are having family history. Among the medium risk diabetics almost 2/3 are of the age range 20-40 years. This shows more risk for young generation.

Regular yoga practice can reduce the possibilities due to family history because family history gives only possible tendency. Positive changes in life style, exercise, relaxation and diet can possibly reduce this. Similarly youngsters of medium risk also can avoid getting into problem by adhering to yoga.

This study created alertness of diabetes and its complications in rural people of this region. The standard data of the present study concerning the prevalence of T2DM and its related risk factors could be useful for implementation of the National Program for control of Diabetes. Hence, future research in this direction is a necessity of the time.

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1. INTRODUCTION

1.1 DIABETES MELLITUS

Diabetes mellitus is a chronic non –communicable disease resulting in increased blood glucose levels. In diabetes there is deficiency of insulin secretion by the pancreas or ineffectiveness of secreted insulin, which can either be inherited or acquired. Over time, having too much glucose in your blood (Hyperglycaemia) can cause serious problems, and causes damage, dysfunction, and failure of different organs especially the heart, eyes, kidneys, and nerves, and blood vessels(Care, 2013)

1.2 CLASSIFICATION

Diabetes mellitus can be classified into the following general categories:

Type 1 Diabetes Mellitus: Type 1 diabetes (due to β -cell destruction, usually leading to absolute insulin deficiency) is also known as insulin-dependent, juvenile or childhood-onset is characterized by deficient insulin production and requires daily administration of insulin. The type 1 diabetes is not preventable with current knowledge and the cause of it is not known.

Type 2 diabetes mellitus Type 2 diabetes (due to a progressive insulin secretion defect on the background of insulin resistance) formerly called non-insulin-dependent or adult-onset results from the body's ineffective use of insulin. Majority of people are with type 2 diabetes around the world, and is largely because of excess body weight and physical inactivity

Gestational diabetes mellitus : Gestational diabetes mellitus (GDM) (diagnosed in the 2nd or 3rd trimester of pregnancy that is not clearly overt diabetes) is hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes, occurring during pregnancy(Tests & Diabetes, 2015)

1.3 CAUSES

Type 2 diabetes occurs when the hormone insulin is not used effectively by the cells in your body. Insulin is needed for cells to take in glucose (sugar) from the bloodstream and convert it into energy. Ineffective use of insulin results in the body becoming resistant to insulin - also known as insulin resistance, which in turn causes blood sugar levels to raise hyperglycaemia. The important cause is obesity, lifestyle factors and genetic, lack of physical activity, abdominal adiposity, tobacco, genetic factors, obesity, malnutrition & stress.(Association, 2014)

1.4 SIGN AND SYMPTOMS

The following are some of the signs and symptoms of diabetes mellitus. Increased sugar level, feeling of tingling sensation in fingers and toes. Affects blood circulation, making it difficult for the body to heal wounds, poor blood circulation. If you also notice redness, rashes, itchy skin or inflammation on any part of the body, it could indicate skin infections as a result of diabetes. Signs like vomiting, nausea, bloating are generally seen. Diabetic retinopathy is an increasing problem among people with diabetes (as symptoms of poor or blurred vision are ignored).The effect on blood circulation in diabetics can become so severe that it can also damage blood vessels in the eyes. chest pain coupled with heaviness and shortness of breath is also one of the symptoms of diabetes.(Satish & Lakshmi, 2016)

1.5.1 WORLD WIDE

The estimates of DM burden worldwide, 371 million people actually have DM and about 80% live in Low and Middle Income countries. The number of people expected to have DM by 2030 is over 550 million. The number of people living with diabetes in India has increased. From 61 million in 2011 to 67 million in 2014. India has the second largest diabetic population after China in the world.(Huang, Fernandes, Karuranga, Malanda, & Cho, 2017).

1.5.2 INDIA

People with diabetes in India would rise from 65.1 million in 2013 to 109 million in 2035 DM, being a lifestyle disease, is on the rise in urban areas; we reported that the prevalence of DM in the population older than 40 years, in urban India, was around 28%.However, in a study carried out in South India where the population was hybrid, both rural and urban, the prevalence of DM was around 11%.The Indian Council of Medical Research-India Diabetes (ICMR-INDIAB) Study, which was carried out in three states (Tamil Nadu, Maharashtra, and Jharkhand) and one union territory (Chandigarh), reported a varied prevalence of diabetes: 10.4% in Tamil Nadu, 8.4% in Maharashtra, 5.3% in Jharkhand, and 13.6% in Chandigarh.(Raman, Ganesan, Pal, Kulothungan, & Sharma, 2014).

1.5.3 KARNATAKA

“Considering the 8.6% of overall prevalence of self-reported chronic condition as found in the earlier study in KG Halli, 95 % confidence interval and 1 % of precision, we estimated the

minimum sample size needed for our survey to be 3286 individuals. We added another 50 % of this number in order to cover for non-response. A few factors made us to account for high non response rate. The population of KG Halli comprises largely of migrants who often keep shifting their residence. In the course of our project activities and the earlier survey, we would find many households empty or closed for long time. Also the community in the area is participating in surveys – as they often are approached by various agencies dealing with marketing of commercial products and/or as part of welfare projects/schemes. Majority of adults in the community are daily-wage workers who are often not at home during the day. There are many nuclear families where all the adults might be at work and so it's likely that such households will not have an adult respondent at home when data collectors approached the houses. Considering the average household size of 4.7, we aimed to survey a minimum of 1047 households in KG Halli. Data collection and measurements as part of the UHARP project, a baseline census was conducted in 2009–2010 to understand the socio demographics and health related aspects of the community. We conducted a follow-up survey in 2012–2013 in KG Halli to monitor changes in socio-demography, prevalence of self-reported illness, health-seeking and healthcare expenditure.”(Gowda, Bhojani, Devadasan, & Beerenahally, 2015)

1.5.4 RURAL POPULATION IN INDIA

Prevalence of type 2 diabetes in the rural population in India (Uttar Pradesh) was found to be 8.03%. Prevalence was higher in female population (9.91%) as compared to males (6.79%). 19.74 % of participants over 70 yrs. of age were diabetics while diabetes was present only in 2.95% of participants in the age group of 25-39 year. The maximum numbers of diabetics were in the age group of 50-59 years. 10.04 % of participants were diagnosed to be Pre-diabetics. 35.77% of the diabetics were newly diagnosed(Singh et al., 2017)

1.5.5 URBAN POPULATION IN INDIA

The National Urban Diabetes Survey (NUDS) was conducted in 6 large cities from different regions of India in 2001. The study showed that the age standardized prevalence of T2D was 12.1%. The prevalence was the highest in Hyderabad (16.6%), followed by Chennai (13.5%), Bengaluru (12.4%), Kolkata (11.7%), New Delhi (11.6%), and Mumbai (9.3%). This study did not sample rural areas. PODIS (Prevalence of Diabetes in India Study) was carried out

in 49 urban Centres in different parts of India to determine urban differences in T2D. When American Diabetes Association criteria were used, the prevalence of diabetes was 4.7% whereas the prevalence according to World Health Organization criteria was 5.9%.(Joshi et al., 2014)

2. LITERATURE REVIEW

2.1: ANCIENT LITERATURE

INTRODUCTION OF DHYANA:-

“Dhyana is a Sanskrit word meaning “meditation”. It is derived from “the root word, dhi, meaning “receptacle” or “the mind”, and Yana, meaning “moving” or “going”. An alternate root word, dhyai, means “to think of “.

In Hindu tradition that is derived from Patanjali yoga sutras, Dhyana is a refined meditative practice that requires deep mental concentration. This kind of meditation is taken up only after engaging in preparatory exercises.

S.No	Scripture study	Chapter and Sloka number
1	Patanjali yoga sutra	1.39, 2.11, 2.29, 3.2, 4.6
2	Bhagvad Gita	2.62, 12.12, 18.52
3	Kaushitaki Upanishad	3.2
4	Shiva Samhita	5.68, 5.81, 5.85, 5.89, 5.91, 5.99, 5.111, 5.112, 5.156, 5.167

PATANJALI YOGA SUTRA:

यथाभिमतध्यानाद्वा ॥

yathābhimatadhyānādvā ॥

Or by meditating on anything else as desired. Sage Patanjali has mentioned several ways to take control of the mind and calm it down. He feels that the people can adopt different methods which they like or which are more acceptable to them for meditating. (Patanjali 1.39)

ध्यानहेयास्तद्वृत्तयः ॥

dhyānaheyāstadvṛttayaḥ ॥

It is sufficient to know that focusing the mind on one particular part of the body or an object is Dhyana; The klesha described earlier, work against the will of a Yogi. Though Kriya yoga will help to suppress them, a yogi can use Dhyana to bring these kleshas to their subtlest form and

make them in active. During Dhyana, a yogi will be able to drive out the information coming from sensory organs and sit without any external disturbances afflicting his mind. (Patanjali 2.11)

यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावङ्गानि ॥

yamaniyamāsanaprāṇāyāmapratyāhārādhāraṇādhyānasamādhayo'sṭāvaṅgāni ॥

In this sutra the eight steps of yoga are mentioned. The first five, (Yama, Niyama, Asana, Pranayama and Pratyahara) are known as Bahirang Yoga which is nothing but controlling the mind in an indirect manner. The last three (Dharana, Dhyana and Samadhi) are considered as Antharanga Yoga which are direct methods to gain mastery over the mind. (Patanjali 2.29)

तत्र प्रत्ययैकतानता ध्यानम् ॥

tatra pratyayaikatānatā dhyānam ॥

Continuous flow of the mind towards an object or a place chosen for meditation is Dhyana. (Patanjali 3.2).

तत्र ध्यानजमनाशयम् ॥

tatra dhyānajamanāśayam ॥

The mind which is born out of meditation will not have any samskaras. The artificial minds created by the yogi are no doubt similar to the original mind, but the only difference is that these new minds will not have any Samskaras of their own. They just help the Yogi to finish his Karmaphalas and disappear as soon as their work is done. (Patanjali 4.6).

BHAGVAD GITA:

ध्यायतो विषयान्पुंसः सङ्गस्तेषूपजायते ।

सङ्गात्सञ्जायते कामः कामात्क्रोधोऽभिजायते ॥

dhyāyato viṣayānpumsaḥ saṅgasteṣūpajāyate ।

saṅgātsañjāyate kamaḥ kāmātkrodho'bhiajāyate ॥

When a man thinks of objects, “attachment” for them arises; from attachment “desire” is born; from desire arises “anger”. (B.Gita 2.62)

श्रेयो हि ज्ञानमभ्यासाज्ज्ञानाद्ध्यानं विशिष्यते ।

ध्यानात्कर्मफलत्यागस्त्यागाच्छान्तिरनन्तरम् ॥

śreyo hi jñānamabhyāsājñānāddhayānam viśiṣyate ।

dhyānātkarmafalatyāgastyāgācchāntiranantaram ॥

Knowledge is indeed better than practice; meditation is better than knowledge; renunciation of the fruits of action is better than meditation; peace immediately follows renunciation. (B. Gita 12.12)

विविक्तसेवी लघ्वाशी यतवाक्कायमानसः ।

ध्यानयोगपरो नित्यं वैराग्यं समुपाश्रितः ॥

viviktasevī laḡhvāśī yatavākkāyamānasah ।

dhyānayogaparo nityam vairāgyam samupāśritaḥ ॥

Some, by meditation, behold the Self in the Self by the Self; others by the “ Dwelling in solitude; eating but little; speech, body and mind subded; always engaged in meditation and concentration; taking refuge in dispassion. (B.Gita 18.52)

KAUSHITAKI UPANISHAD:

मनसा ध्यानमित्येकभूयं वै प्राणाः ॥

manasā dhyānamityekabhūyam vai prāṇāḥ ॥

With the mind meditate on me as being Prana. (Kaushitaki Up. 3.2)

SHIVA SAMHITA:

जरामरणदुःखौघान्नाशयति गुरोर्वचः ।

इदं ध्यानं सदा कार्यं पचनाभ्यासिना परम् ।

ध्यानमात्रेण योगीन्द्रो मुच्यते सर्वकिल्बिषात् ॥

Jarāmarañaduḥkhaughānnāśayati gurorvacaḥ|

Idaṁ dhyānaṁ sadā kāryaṁ pacanābhyāsinā param|

Dhyānamātreṇa yogīndro mucyate sarvakilviṣāt||

This is the dictum of the Guru:- “It destroys old age, death, and troubles innumerable.” The practitioner of Pranayama ought always to meditate upon it; by its very contemplation, the great Yogi is freed from all sins. (Shiva Samhita 5.68)

तस्मिन् ध्यानं सदा योगी करोति मणिपूरके ।

रस्य पातालसिद्धिः स्नान्निरन्तरसुखावहा ॥

ईप्सितञ्च भवेल्लोके दुःखरोगविनाशनम् ।

कालस्य षञ्चनञ्चापि परदेहप्रवेशनम् ॥

Tasmin dhyānaṁ sadā yogī karoti maṇipūrake|

Rasya pātālasiddhiḥ snānnirantarasukhāvahā||

Īpsitañca bhavelloke duḥkharogavināśanam|

Kālasya ṣaṅcanañcāpi paradehpraveśanam||

When the Yogi contemplates on the Manipura lotus, he gets the power called the patala-siddhi – the giver of constant happiness. He becomes lord of desires, destroys sorrows and diseases, cheats death, and can enter the body of another. (Shiva Samhita 5.81)

सिद्धः पिनाकी यत्रास्ते काकिनी यत्र देवता ।

एतस्मिन्सततं ध्यानं हृत्पाथोजे करोति यः ॥

क्षुभ्यन्ते तस्य कान्ता वै कामार्ता दिव्ययोषितः ॥

Siddhaḥ pinākī yatrāste kākinī yatra devatā |
Etasminsatataṁ dhyānaṁ hr̥tpāthoḥ karoti yaḥ ||
Kṣubhyante tasya kāntā vai kāmārtā divyayoṣitaḥ ||

Its presiding adept is Pinaki, and the Kakini is its goddess. He who always contemplates on this lotus of the heart is eagerly desired by celestial maidens. (Shiva Samhita 5.85)

एतद्ध्यानस्य माहात्म्यं कथितुं नैव शक्यते ।

ब्रह्माद्याः सकला देवा गोपयन्ति परन्त्विदम् ॥

Etaddhyānasya mātmyam̐ kathitum̐ naiva śakyate |
Brahmādyāḥ sakalā devā gopayanti parantvidam̐ ||

I cannot fully describe the importance of the meditation of this lotus; even the gods Brahma etc, keep the method of its contemplation secret. (Shiva Samhita 5.89)

ध्यानं करोति यो नित्यं स योगीश्वरपण्डितः ।

किन्त्वस्य योगिनोऽन्यत्र विशुद्धाख्ये सरोरुहे ॥

चतुर्वेदा विभासन्ते सरहस्या निधेरिव ॥

Dhyānaṁ karoti yo nityaṁ sa yogīśvarapaṇḍitaḥ |
Kintvasya yogino'nyatra viśuddhākhya saroruhe ||
Caturvedā vibhāsante sarahasyā nidheriva ||

He who always contemplates it, is truly the lord of the Yogis, and deserves to be called wise; by the meditation of this Vishuddha lotus, the Yogi at once understands the four Vedas with their mysteries. (Shiva Samhita 5.91)

तुरियं त्रितयं लिंगं तदाहं मुक्तिदायकः ।

ध्यानमात्रेण योगीन्द्रो मत्समो भवति ध्रुवम् ॥

Turiyaṁ tritayaṁ līṅgaṁ tadāhaṁ muktidāyakaḥ |

Dhyānamātreṇa yogīndro matsamo bhavati dhruvam | |

I am the giver of salvation; I am the third linga in the Turiya (the state of ecstasy, also the name of the thousand-petalled lotus). By contemplating on this, the Yogi becomes certainly like me. (Shiva Samhita 5.99)

यः करोति सदाध्यानमाज्ञापद्मस्य गोपितम् ।

पूर्वजन्मकृतं कर्म विनश्येदविरोधतः ॥

Yaḥ karoti sadādhyānamājñāpadmasya gopitam |

Pūrvajanmakṛtaṁ karma vinaśyedavirodhataḥ | |

He who always contemplates on the hidden Ajna lotus, at once destroys all the harms of his past life, without any opposition (Shiva Samhita 5.111)

इह स्थिते यदा योगी ध्यानं कुर्यान्निरन्तरम् ।

तदा करोति प्रतिमां पूजाजपमनर्थवत् ॥

iha sthite yadā yogī dhyānaṁ kuryānnirantaram |

Tadā karoti pratimāṁ pūjājapamanarthavat | |

Remaining in this place, when the Yogi meditates constantly, then to him all forms, worships and prayers appear as worthless. (Shiva Samhita 5.112)

निरन्तरकृते ध्याने जगद्विस्मरणं भवेत् ।

तदा विचित्रसामर्थ्यं योगिनो भति ध्रुवम् ॥

Nirantarakṛte dhyāne jagadvismaraṇaṁ bhavet |

Tadā vicitrasāmarthyam yogino bhati dhruvam||

By constant meditation one forgets the world, the in sooth the Yogi Obatains wonderful power.
(Shiva Samhita 5.156)

ध्यानादेव विजानाति विचित्रेक्षणसम्भवम् ।

अणिमादिगुणेपेतो भवत्येव न संशयः ॥

Dhyānādeva vijānāti vicitrekṣaṇasambhavam|

Aṇimādiguṇepeto bhavatyeva Na saṁśayaḥ| |

By meditation one at once knows the wonderful effects of this Yoga (o.e., of the contemplation of the void); undoubtedly he attains the psychic powers, called anima and laghima, etc. (Shiva Samhita 5.167)

2.2: SCIENTIFIC LITERATURE SURVEY:

2.2.1 World Prevalence

S.NO	AUTHOR	METHOD	RESULT	Conclusion
01	(Sudore et al., 2012)	13,171 people with diabetes mellitus 2, between age 30–75 yrs, from Kaiser Permanente, Northern California	Survey in Northern California. Mean age was 60 years; 48 % were women, and 43 % were non-white. Acute pain was prevalent (41.8 %) and 39.7 % reported chronic pain, 24.6 % fatigue, 23.7 % neuropathy, 23.5 %	Pain and non-pain symptoms were common among all patients, not only among those near the end of life. . Older adults reported more physical symptoms, whereas younger adults reported more

			depression, 24.2 % insomnia, and 15.6 % physical/emotional disability	psychosocial symptoms.
02	(Marrett, Radican, Davies, & Zhang, 2011)	Cross sectional design	After adjusting for age, gender, weight gain, HbA1c, microvascular complications, and selected cardiovascular conditions, the utility decrement was 0.045 (by level of severity: 0.009, 0.055, 0.131, 0.208), and the HFS increase was 9.6 (by severity: 5.3, 12.4, 17.6, 23.2). HRQoL further decreased with greater frequency of hypoglycemic episodes.	Self-reported hypoglycemia is independently associated with lower HRQoL, and the magnitude of this reduction increases with both severity and frequency of episodes in patients with type 2 diabetes treated with oral antihyperglycemic agents.
03	(Unwin et al., 2017)	A representative population-based sample	The prevalence of undiagnosed diabetes	The agreement between FPG and

		<p>of 1234 adults (above 25 years of age) resident in Barbados was recruited. We used standard methods to collect data on height, weight, blood pressure, fasting lipids and history of diagnosed diabetes, and to measure fasting glucose and HbA1c</p>	<p>was higher, but not significantly so, by HbA1c (4.9%, 95% CI 3.5, 6.8) vs FPG (3.5%, 2.4, 5.1). Overall 79 individuals had diabetes by either measure, but only 21 on both. The prevalence of pre-diabetes was higher by HbA1c compared to FPG: 41.7% (37.9, 45.6) vs 15.0% (12.8, 17.5). Overall 558 individuals had pre-diabetes by either measure, but only 107 on both. HbA1c</p>	<p>HbA1c defined hyperglycaemia is poor. In addition, there are some differences in the phenotype of those identified, and HbA1c gives a much higher prevalence of pre-diabetes. The routine use of HbA1c for screening and diagnosis in this population would have major implications for clinical and public health policies and resources</p>
04	(Zhao, Cho, Kim, Friedman, & Guallar, 2014)	Cross-sectional study	<p>The prevalence of diabetes, pre-diabetes, metabolic syndrome, and insulin resistance were 17.1, 49.0, 32.1, and 43.4%, respectively, and the prevalence of glaucoma was 4.2%</p>	<p>Diabetes was associated with higher risk of glaucoma. Participants without diabetes but at the higher levels of fasting glucose,</p>

			(95% CI 3.3–5.3%). prevalence of diabetes, elevated blood pressure, and elevated fasting glucose	fasting insulin, HbA1c and HOMA- IR spectrum may also be at greater risk of glaucoma.
05	(Huang, Ogurtsova, et al., 2017)	Population-based were used to estimate age- dependent diabetes prevalence for each country and territory in 2017. Diabetes prevalence for people above 60 years in each country and territory were calculated based on country level age- specific diabetes prevalence estimates	Diabetes prevalence peaks at age group 65-69 years in men, and then it shows a slight decrease. Diabetes is more prevalent in women than men at age group 75 to 99 years, probably due to the larger population in women than men. Diabetes prevalence is a little higher in men than women at age group 60 to 69 years	Due to the global population aging, there will be an almost two-fold increase in the number of people older than 60 years with diabetes from 2017 to 2045.

2.2.2 INDIA PREVALENCE

S.NO	AUTHOR	METHOD	RESULT	CONCLUSION

01	(Anjana et al., 2011)	RCT	Multiple logistic regression analysis showed that age, male sex, family history of diabetes, urban residence, abdominal obesity, generalized obesity, hypertension and income status were significantly Associated with diabetes.	the whole of India would be 62.4 million people with diabetes and 77.2 million people with pre diabetes
02	(Shahi et al., 2012)	678 diabetic patients were examined, of which 97 reported diabetic foot ulcers (DFUs). Patients were interviewed using a pre-tested structured questionnaire to document clinical history. Statistical analysis was performed using SPSS 16.0 software.	Among the data of daily habits, risk of DFUs was significantly associated with tobacco chewing diabetic patients (p =0.00).The percentage value of sensitivity 95.7 and specificity 93.8 respectively for risk of foot ulcers clearly indicated the overall involvement	A high prevalence of foot ulcers was confirmed among North Indian rural diabetic patients. Age, duration of diabetes, tobacco use, oral hypoglycemic treatment/insulin use and rural location were identified as important risk factors.

			of risk factors for DFUs.	
03	(Hendriks & Rademakers, 2014)	The Health insurance company randomly selected 300 patients per Diabetes care network. If less than 300 patients received care from one of the networks all patients were selected with a minimum of 80 patients per network. This resulted in the total of 23,074 people.	The response of the total study was 8,609 (response rate 37%). The group of respondents consisted of significantly more men than the group of non-respondents (48% versus 44%). Also, mean age was significantly lower in the group of respondents, but the difference with the group of non-respondents was less than 2.5 months.	People with diabetes are more and more expected to be active patients, that is to be in charge of their own Health and the healthcare they receive. One way to accomplish this is by educating and training people to get involved, be well-informed and able to adjust their behavior to maintain a good health. We reinforced prior findings among a sample of Dutch people with diabetes and showed that patient activation differs between patient sub groups.

04	(Joshi et al., 2014)	Cross sectional, single-visit, multicentre, two-arm, single-country survey. Participants were enrolled from 10 specialty endocrinology/dialectology centres from five regions of India.	The mean (SD) percentage of complex CHO intake from total CHO was 89.5 ± 15.3 (95% CI 88.0 to 91.1). The mean (SD) total protein/fat intake per day (g) was 57.1 (74.0)/37.2 (18.6) and 57.9 (27.2)/55.3 (98.2) in T2DM and non-T2DM groups, respectively.	study shows that CHO constitutes 64.1% of total energy from diet in T2DM participants, higher than that recommended in India. However, our findings need to be confirmed in a larger epidemiological survey
05	(Raman et al., 2014)	A multistage cluster sampling method was used	The prevalence of diabetes in the rural Indian population was 10.4% (95% CI 10.39% to 10.42%); the prevalence of diabetic retinopathy, among patients with diabetes mellitus, was 10.3% (95% CI 8.53% to 11.97%)	the prevalence of diabetic retinopathy was around 10%; the strongest predictor being the duration of diabetes

2.2.3 KARNATAKA REVIEW

S.NO	AUTHOR	METHOD	RESULT	CONCLUSION
01	(Raj & Angadi, 2010)	A hospital based cross-sectional study in 730 type 2 diabetic patients aged ≥ 20 years was Under taken.	Mean age was 56.64 \pm 11.38 years, 67% were males. 15.35% of respondents had poor, 59.9% average and 24.8% had good knowledge. Majority (60-90%) of the respondents had positive attitudes. 36.4% of the respondents were taking extra care in case they were injured and 40.7% were exercising regularly.	Though good number of respondents had positive knowledge and attitude regarding diabetes, the same cannot be said about practices
02	(Rao, Kamath, Shetty, & Kamath, 2010)	cross-sectional community-based survey using a two stage, stratified, random sampling technique. Data was collected by a personal, face-to-	Among males, 18.8% were found to have diabetes, as compared to 14.4% among females. Self-reported diabetes was 11.2%,	A high prevalence of diabetes was noted in this coastal population. It is also true that changes have been noted in the lifestyle of

		face interview followed by blood sugar estimation using a glucometer	while 4.8% of previously normal people were found to have high fasting capillary blood	the population, which could have contributed to the above.
03	(Bhalerao, 2014)	A community based cross-sectional study	The prevalence of T2DM among gender was observed elevated in females (64.6%) compared to males (35.4%). The prevalence of T2DM in association with literacy observed in this study was - Illiterate group (47.3%), Primary education group (19.2%), Secondary school group (28.7%) and graduation and above group (4.9%). The prevalence stratified by occupation ranged from 11.7% (skilled I) to 23.4% (Non workers)	it was observed that advanced age, occupational changes, BMI, substance abuse like alcohol and smoking, truncal obesity and family history of diabetes were highly associated risk factors for T2DM whereas literacy, gender and central obesity showed no association with risk of T2DM
04	(Mentock et al.,	This cross-sectional	Out of 204	Screening of at risk

	2017)	<p>study was carried out in the main city and surrounding per urban villages within a 2-h Drive of Mangalore, India. The City population of over 600,000 People as recorded in the 2011 Census The Surrounding communities are comprised of more rural and low income areas.</p>	<p>participants, predictors of at target status included age and rural living area. Participants were commonly diagnosed with symptoms of diabetes (44.6%). Participants demonstrated frequent health care provider contact (51% in last one month, 74.5% in last three months).</p>	<p>populations, targeted SMS campaigns, or diabetes specific training for healthcare providers may improve clinical outcomes.</p>
05	(Shidam, Roy, Sahu, Kumar, & Ananthanarayanan, 2015)	<p>Patient information was collected using a pretested interview schedule. DM status was assessed after reviewing the available records with the patients and/ or their self-reported history regarding DM status. Patients with known DM status were not</p>	<p>A total of 650 patients aged 730 years were recruited for DM screening during the study period. DM status could be assessed for 570 patients with presumed TB by either eliciting their previous history of DM (self reported) or estimating blood glucose levels. After</p>	<p>One fifth of the presumed TB patients had diabetes, and nearly half of these patients were newly diagnosed. Opportunity screening of presumed TB patients for DM in routine care will help in early detection of</p>

		<p>investigated further for DM. Patients with unknown DM status A total of 650 patients aged 730 years were recruited for DM screening during the study period. DM status could be assessed for 570 patients with presumed TB by either eliciting their previous history of DM (self reported) or estimating blood glucose levels. After excluding 80 persons whose DM status we were unable to determine, 570 patients with presumed TB were considered for the final analysis</p> <p>were encouraged to undergo oral glucose tolerance testing (OGTT)</p>	<p>excluding 80 persons whose DM status we were unable to determine, 570 patients with presumed TB were considered for the final analysis</p>	<p>diabetes and pre-diabetes.</p>
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3. MATERIALS AND METHODS

3.1 SUBJECTS:

3.1.1 SCREENING PROCEDURE

Institutional ethical committee clearance was obtained prior to the initiation of the study. We conducted a cross-sectional community based survey, among individuals of either sex, aged 20 years and above. The study was carried out in the field practice area of Araneru, which is situated along the rural area in the southern part of Karnataka, India. The field practice area covers a population of 440. The population in this town is homogeneous in terms of occupation, socio-economic status and food habits. Study population included all men and women aged 20 and above. Study variables included, socio-demographic characteristics, physical activity, and anthropometric measurements. Pregnant or lactating women up to 12 weeks post-partum were excluded from the study. Starting from the first house onwards all the houses within the lane were covered continuously, keeping towards the left. This procedure was continued until the whole village is covered. Written informed consent was obtained from all the subjects. During house visits, data was collected by personal face to face interview using a pre-designed questionnaire. The questionnaire included details on socio-demographic variables, anthropometric measurements and physical activity status. A pre-tested scale was used to grade physical activity into sedentary, moderate and heavy work based on their daily activities. Socio-economic status scale also was used. Weight was recorded using a standard weighing scale (Krupps weighing scale, New Delhi, India) that was kept on a firm horizontal surface. Height was recorded using a non-stretchable measuring tape to the nearest 1 cm. Subjects were requested to stand straight in bare feet, with heels together, back against the wall, arms loosely at their side and looking forward. Body mass index (BMI) was calculated using the formula, weight (kg) / height² (m). Waist circumference was measured to the nearest 0.1 cm at the mid-point between costal margin and iliac crest using a non-stretchable measuring tape. Hip circumference was measured at the level of the greater trochanters (widest portion of the hip) to the nearest 0.1 cm by a measuring tape, while the subject was standing with the arms by the side and feet together. Waist-hip ratio was calculated as the ratio of waist circumference over hip circumference. Waist and hip circumference measurements were taken with the clothes on.

3.1.2 INCLUSION CRITERIA

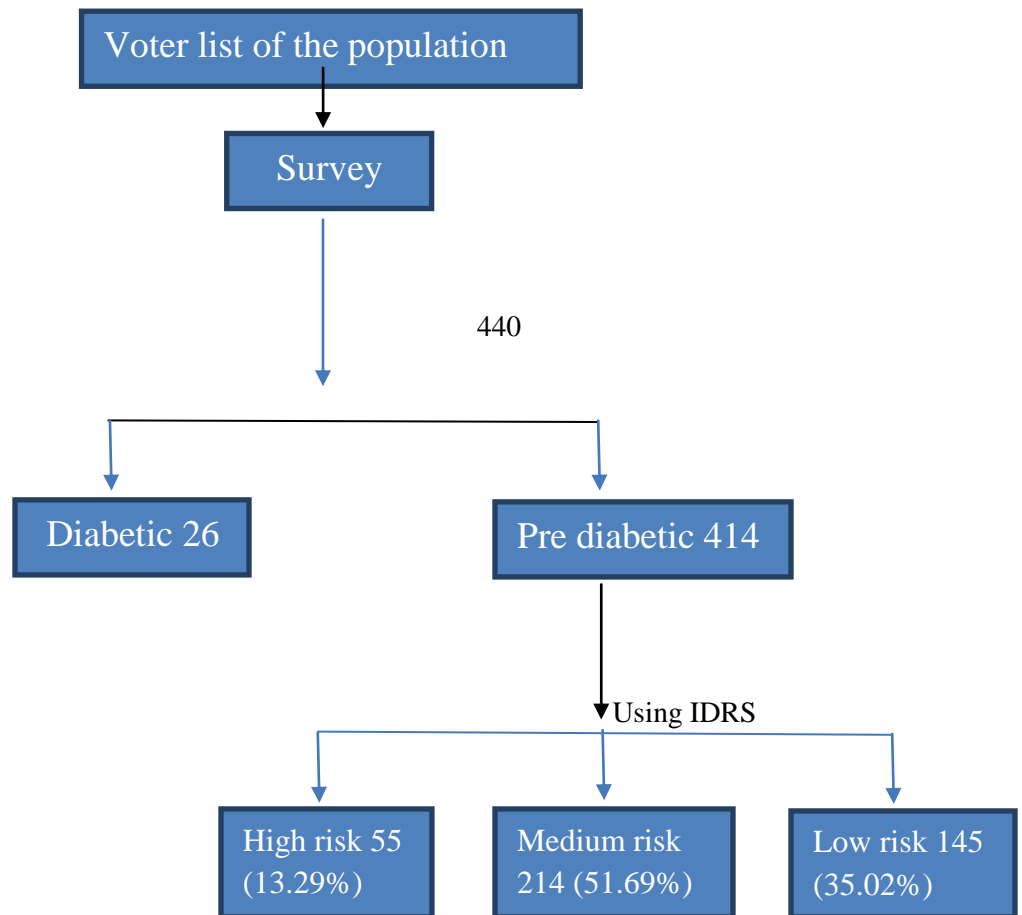
All people of Araneru above 20 years age.

EXCLUSION CRITERIA

Nil

3.1.3 FLOW CHART OF THE STUDY

Flow chart



440 Participants in that Male 212, Female 228

3.1.4 SOURCE OF SUBJECT

The study is done in Araneru, Sarjaapur, Anekal, Bangalore.

3.1.5 SAMPLE SIZE

Survey is conducted on 630 population available in Araneru rural area In Karnataka.

3.1.6 ETHICAL CLEARANCE AND CONSENT

The Institute Ethics Committee Approval (SVYASA) was obtained before the start of the study. The heads of the rural area were explained the details of the study and their oral consent was sought to conduct the survey.

3.2 METHODS:

A survey was conducted in Araneru. Persons with age range from 20 to 70yrs were surveyed. Weight, waist circumference, Blood pressure and psychological parameters were collected.

Primary outcome measures

3.2.1 IDRS

The IDRS, based on age, abdominal obesity, family history of diabetes, and physical activity, was calculated for each patient. See appendix for details.

3.2.2 BLOOD PRESSURE

Blood pressure was checked with Sphygmomanometer.

Secondary outcome measures or Anthropometric measurements

3.2.3 BODY WEIGHT

The body weight was measured by using weighing machine. Subjects were asked to remove their footwear while wearing minimum clothing to stand on the scale.

3.2.4 BODY HEIGHT

The height (in centimetres) is measured using a scale graduated in millimetres. This scale is placed against the wall with their head neither lifted nor depressed but facing straight ahead.

3.2.5 BMI

BMI is calculated from the equation- dividing a person's weight in kilograms by height in metres squared.

3.2.6 WAIST CIRCUMFRENCE

This was measured with a non-stretchable centimetre scaled tape, along the horizontal girth at the midpoint between the costal margin and the iliac crest.

4. RESULTS

There are 212 men and 228 women. There are 48.18% of men and 51.82% women participants. 19.1% of the people are in the age group of 20-40 years and 35.9% of the people are in the age group of 41-60 years, 4.9% of the people are in the age group of 61-90 years, and 4.5% of the people are in the age group of 61-90 years. The overall prevalence of diabetes was 5.90%, and 13.29% of the people are in High Risk for Diabetes, 51.69% of the people are in moderate risk for diabetes and 35.02% of the people are in low risk diabetes.

Out of the 26 diabetes 73% of them are of the age range 40-60years, 11.5% are of age range 20-40years and 15% are of age above 60 years and above. Out of the 26 diabetes 38.5% have family history.

Among the 167 person who have medium risk for DM, 9.5% have family history, out of the 167 medium risk persons 26% people are of age range from 40-60. And 63% people are of age range from 20-40years and 11% people of age range above 60.

4.1 DEMORAPHC DATA OF POPULATON

Araneru rural area: rural area total population is 630. In that 440 people were surveyed by using inclusion and exclusion criteria with participants agreed to participate in the study. There were 212 men and 228 women. There were 48.18% of men and 51.82% women participants. 19.1% of the people are in the age group of 20-40 years and 35.9% of the people are in the age group of 41-60 years, 4.9% of the people are in the age group of 61-90 years, and 4.5% of the people are in the age group of 61-90 years. The overall prevalence of diabetes was 5.90% and 13.29% of the people are in High Risk for Diabetes, 51.69% of the people are in moderate risk for diabetes and 35.02% of the people are in low risk diabetes.

TABLE: ARANERU SURVEYED POPULATION

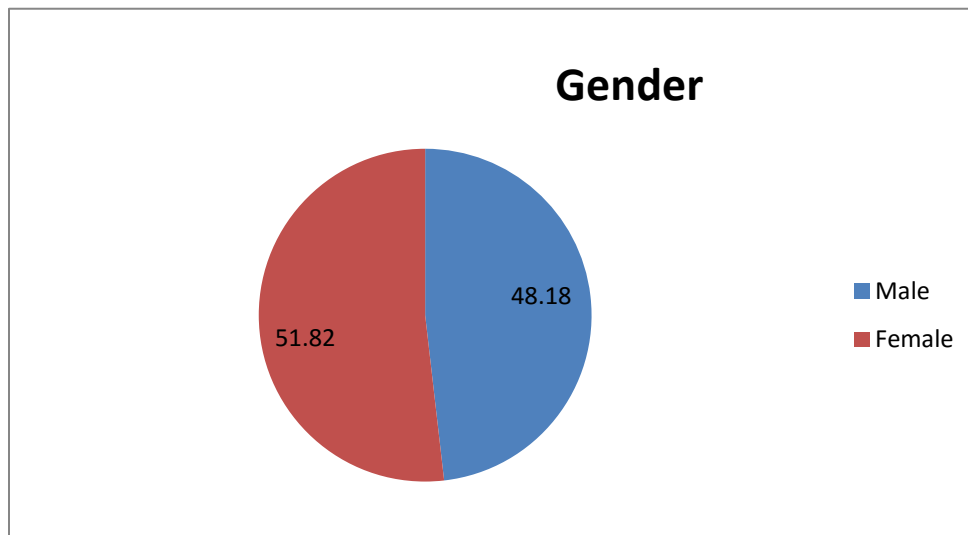
	Surveyed population	Percentage (%)
Total population	440	
Male	212	48.18
Female	228	51.82

In Araneru total population is 440 among them total surveyed population is 440, male are 212 and female are 228.

Table 1: Demographic data of surveyed population-Araneru

Variable		Number of people	Percentage%
Gender	Total	440	
	Male	212	48.18
	Female	228	51.82

FIGURE 1: GENDER PERCENTAGE:-ARANERU VILLAGE

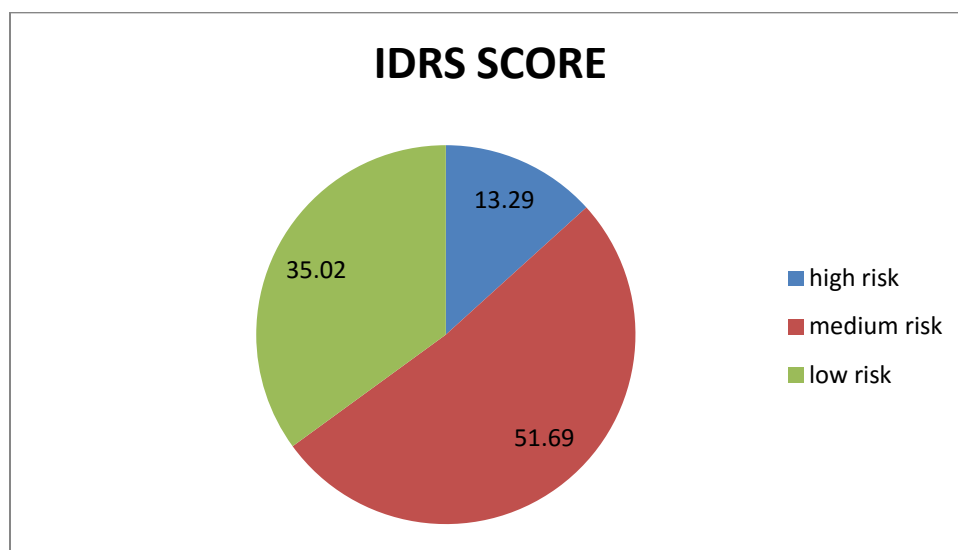


Among total 440 surveyed populations male are 48.18% and female are 51.82%.

Table 2: IDRS Score

IDRS Score	High risk	55	13.29
	Medium risk	214	51.69
	Low risk	145	35.02

FIGURE 2: IDRS SCORE OF ARANERU POPULATION

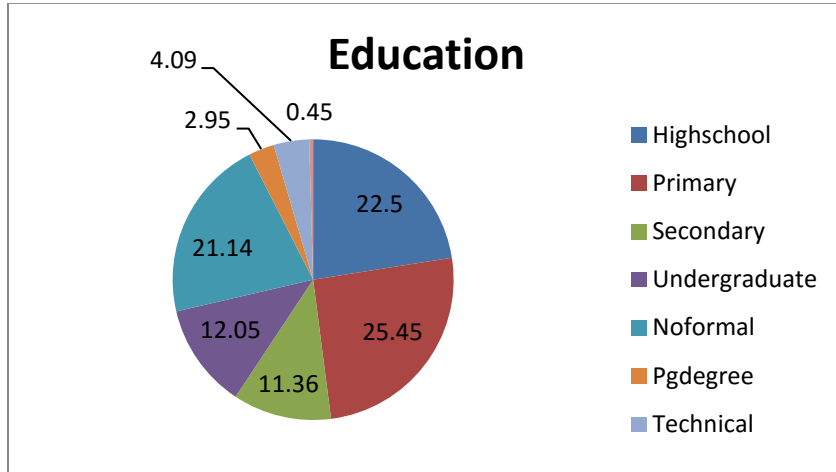


Among 440 surveyed population according to IDRS score 13.29% are under high risk, 51.69% are under medium risk and 35.02% are under low risk.

Table 3: Educational Qualification

Variable		Number of people	Percentage%
Educational qualification	Pg degree	13	2.95ss
	Primary	112	25.45
	Secondary	50	11.36
	Higher	99	22.50
	Technical	18	4.09
	Under Graduate	53	12.05
	Nil	2	0.45
	No formal	93	21.14

Figure 3:- Educational qualification of Araneru population

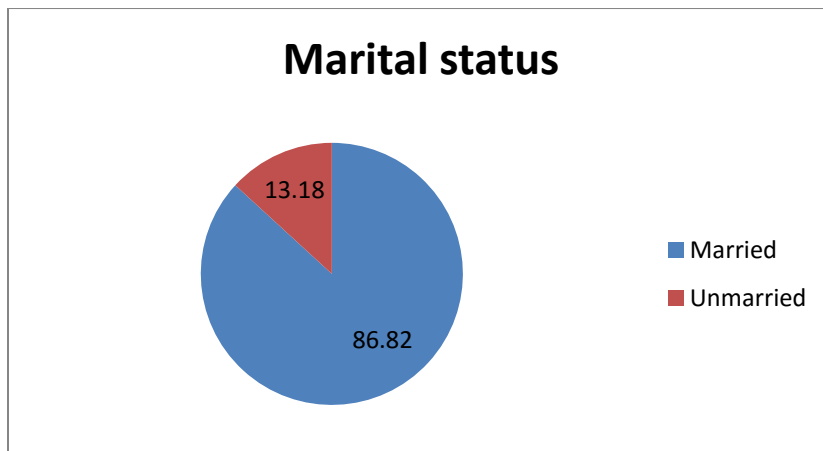


Among 440 surveyed population 2.95 are pg degree, 25.45% have taken primary education, 11.36% have taken secondary education, 22.50% are taken higher education, 4.09% have taken Technical, 12.05% are taken under graduate, 0.45 are null, and no formal is 21.14

Table 4: Marital Status

Marital status	Married	382	86.42
(Figure 4)	Un Married	58	13.18

Figure4:- Marital status of Araneru population

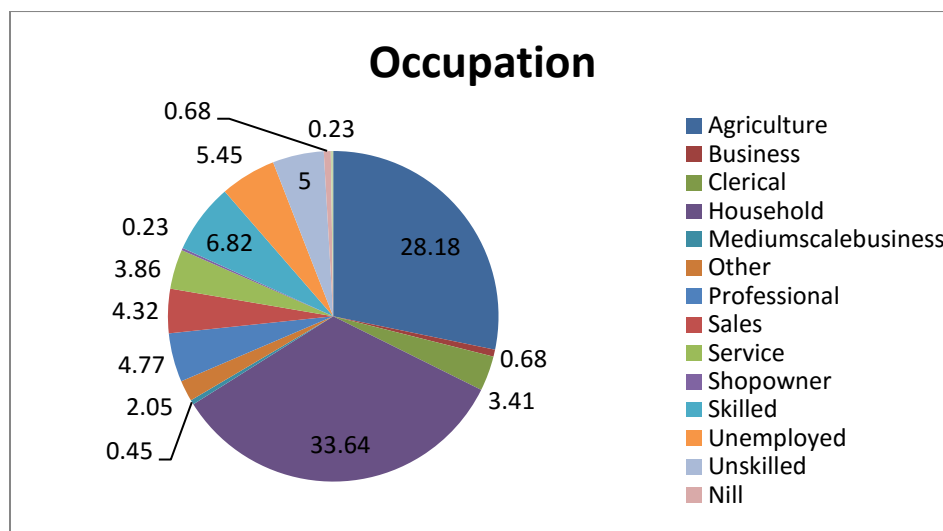


Among 440 surveyed population married people are 86.42%, unmarried people are 13.82%.

Table 5: Occupation

Variable		Number of people	Percentage%
Occupation	Business	3	0.68
	Farmer	0	0
	Professional	21	4.77
	Clerical	15	3.41
	Unemployed	24	5.45
	House hold	148	33.64
	Shop owner	1	0.23
	Agri culture	124	28.18
	Other	9	2.05
	Medium Business	2	0.45
	Self Employed	0	0
	Sale	19	4.32
	Service	17	3.86
	Skilled Manual	30	6.82
Unskilled manual	22	5.00	

Figure 5:- Occupation of Araneru Population



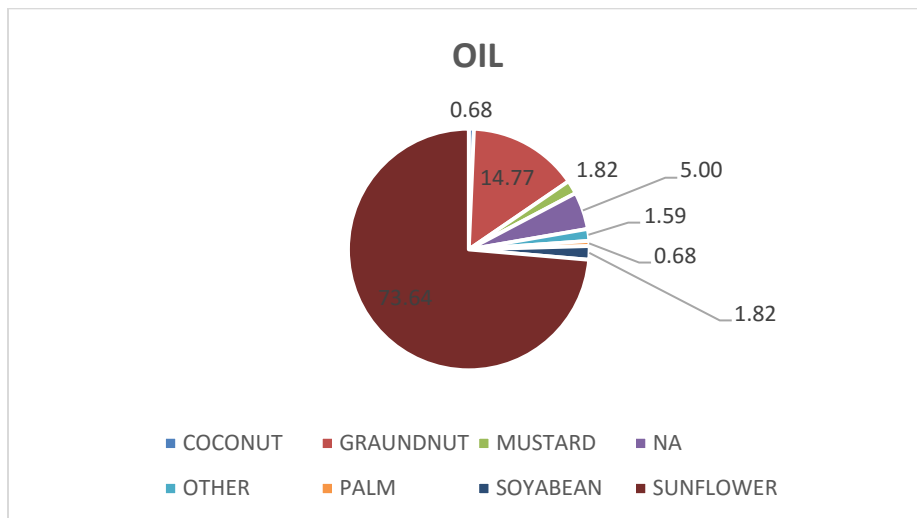
Among 440 surveyed population 0.68% are having their own business, 4.77% people are under professional, 3.41% does clerical work, 5.45% are unemployed, 33.64% are house holders, 0.23% are Shop owner, 28.18% are Agriculture, 2.05% does other works, 0.45 are Medium

Business, 4.32% does sales work, 3.86% people does service, 6.82% are skilled workers and 5.00% are unskilled workers.

Table 6: Oil Food

Variable		Number of people	Percentage%
OIL FOOD	Ground nut	65	14.77
	Other	7	1.59
	Soya bean	8	1.82
	Sunflower	324	73.64
	Coconut	3	0.68
	Mustard	8	1.82
	Palm	3	0.68
	NA	22	5.00

Figure 6:- Diet of Araneru populations



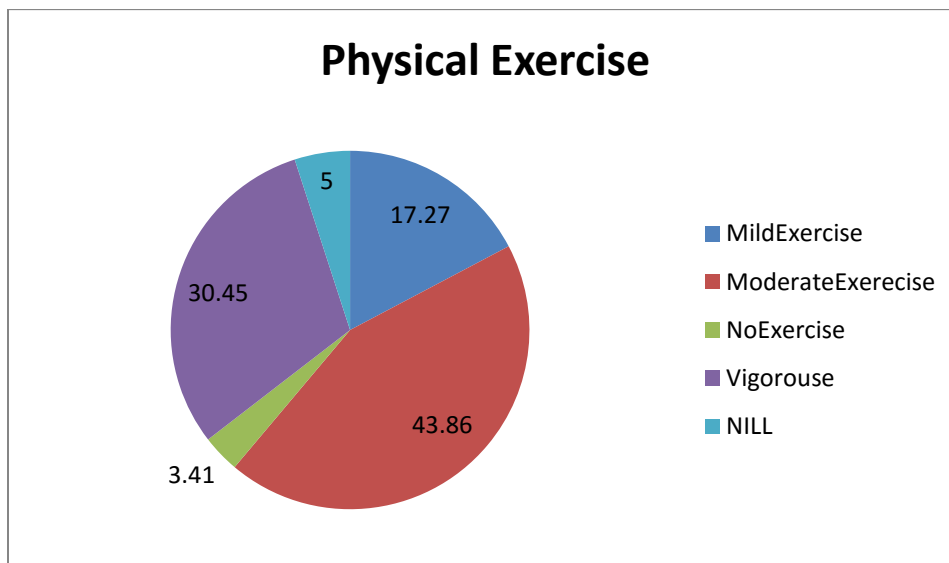
Among 440 surveyed population Groundnut people percentage is 14.77%, soyabean people percentage is 1.82%, Sunflower people percentage is 73.64%, Coconut people percentage is

0.68, Mustard people percentage is 1.82, Palm people percentage is 0.68 and Other people percentage is 1.59.

Table 7: Physical Activity

Variable		Number of people	Percentage%
Physical activity	Vigorous	134	30.45
	Moderate	193	43.86
	Low	76	3.41
	No exercise	15	30.45
	Null	22	5

Figure 7:- Physical activity of Araneru

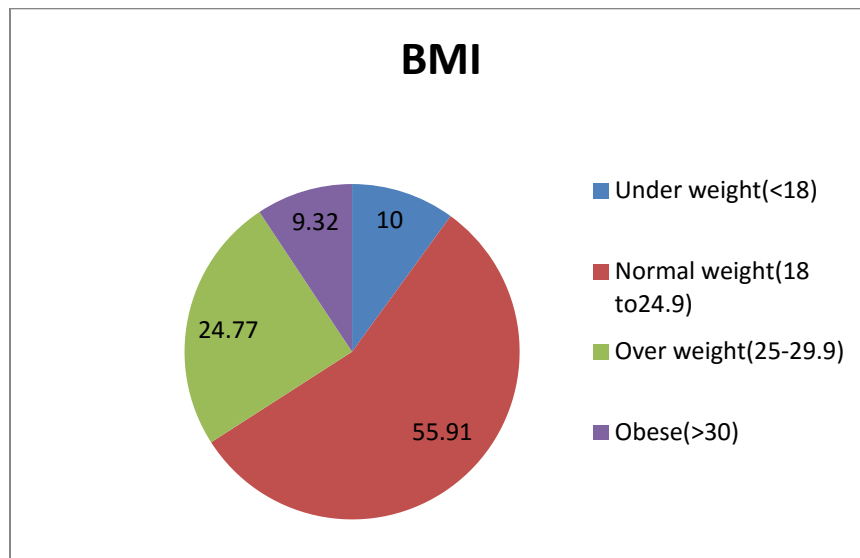


Among 440 surveyed populations 30.45% does vigorous physical activity, 43.86% does moderately, 3.41% does low activity, and 30.45% no exercise and 5% are null.

Table 8: BMI

Variable		Number of people	Percentage%
BMI	Under weight (<18)	44	10
	Normal (18 to 24.9)	246	55.91
	Over weight (25-29.9)	109	24.77
	Obese (>30)	41	9.32

Figure 8:- BMI of Araneru

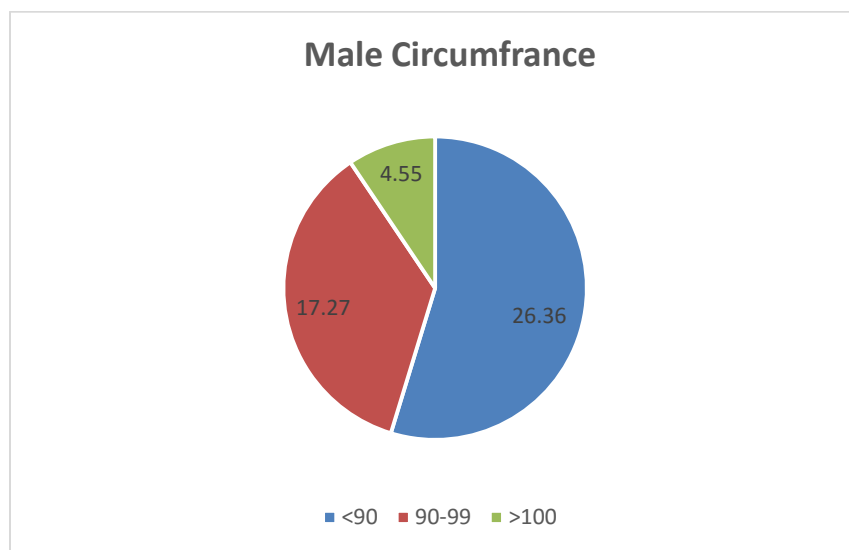


Among 440 surveyed population 10% are under weight, 55.91% are having normal weight, 24.77% are overweight and 9.32% are obese.

Table 9: Male Circumference

Male Circumference		Number of People	Percentage
	<90	116	26.36
	90-99	76	17.27
	>100	20	4.55

Figure 9:- Male Circumference

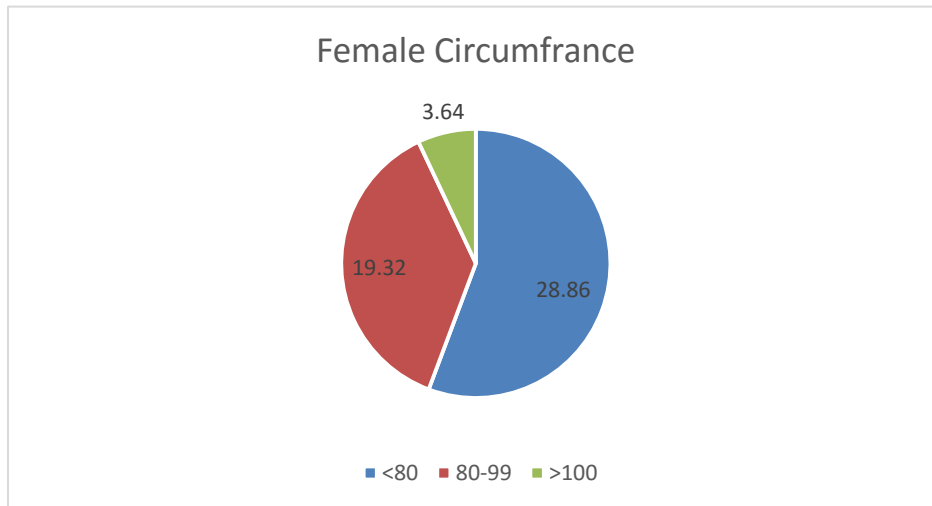


Among 440 surveyed population <90 male circumference is 26.36%, 90-99 male circumference is 17.27% and >100 male circumference is 4.55%.

Table 10: Female Circumference

Female Circumference		Number of people	Percentage
	<80	127	28.86
	80-99	85	19.32
	>100	16	3.63

Figure 10:- Female Circumference

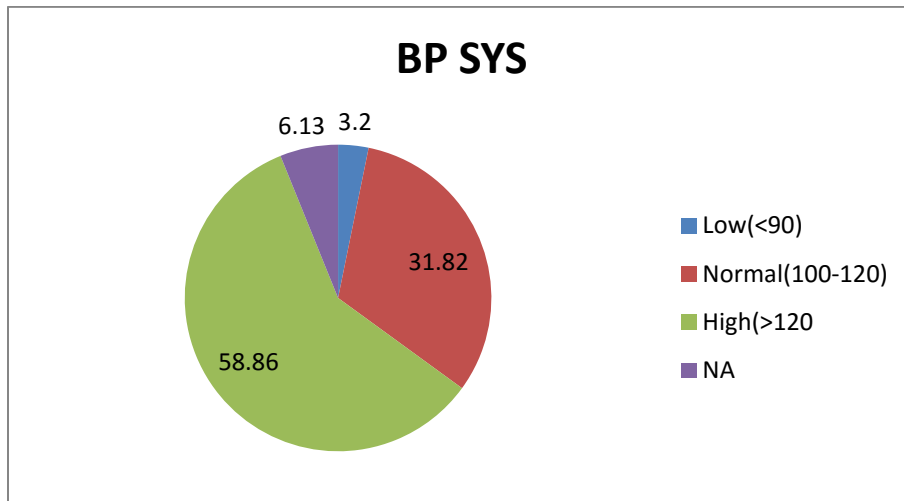


Among 440 surveyed population <80 Female circumference is 28.86%, 80-99 Female circumference is 19.32% and >100 Female circumference is 3.63%.

Table 11: Bp SYS

Variable		Number of people	Percentage%
Bp SYS	Low (<90)	14	2.95
	Normal(100-120)	140	31.82
	High(>120)	259	58.86
	NA	27	6.13

Figure 11: - Bp Sys percentage Of Araneru Population

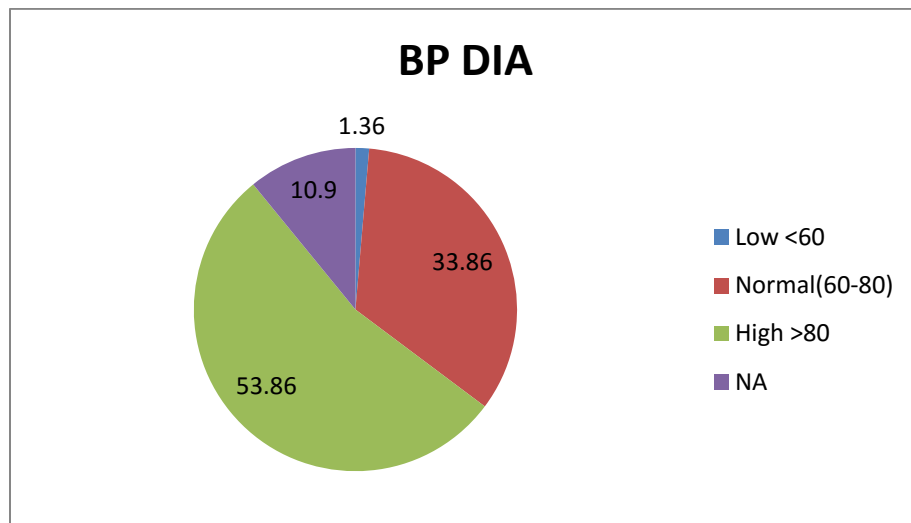


Among 440 surveyed population systolic blood pressure is low in 2.95%, normal in 31.82% is high in 58.86%, NA are 6.13%

Table 12: Bp Dia

Variable		Number of people	Percentage%
Bp Dia	Low(<60)	6	1.36
	Normal(60-80)	149	33.86
	High(>80)	237	53.86
	NA	48	10.9

Figure12:- Bp Dia Percentage of Araneru Population

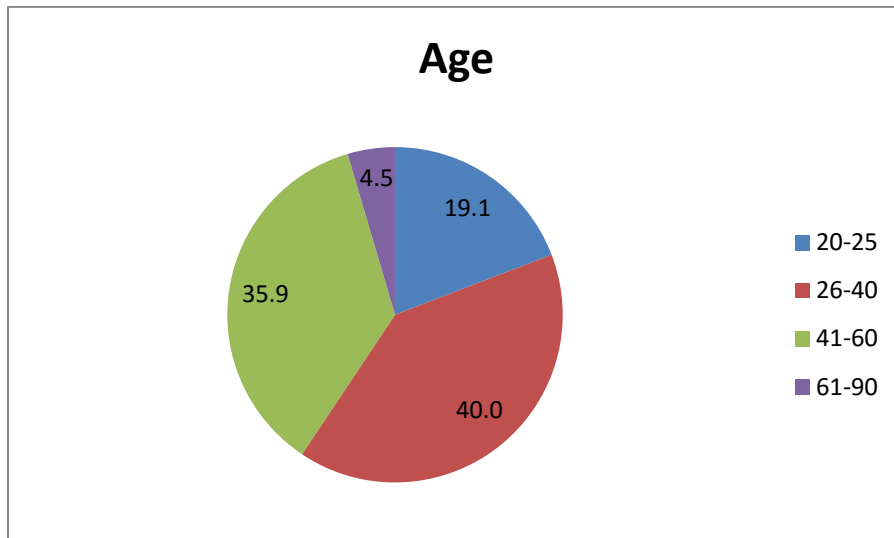


Among 440 surveyed population diastolic blood pressure is low in 1.36%, normal in 33.86% and high in 53.86%, NA are 10.9

Table 13: Age

Variable	Age range	No. of People	Percentage %
Age	20-25	84	19.1
	26-40	177	40.0
	41-60	158	35.9
	61-90	21	4.5
	90 and above	0	0
	Blank	0	0

Figure13:- Age of Araneru population

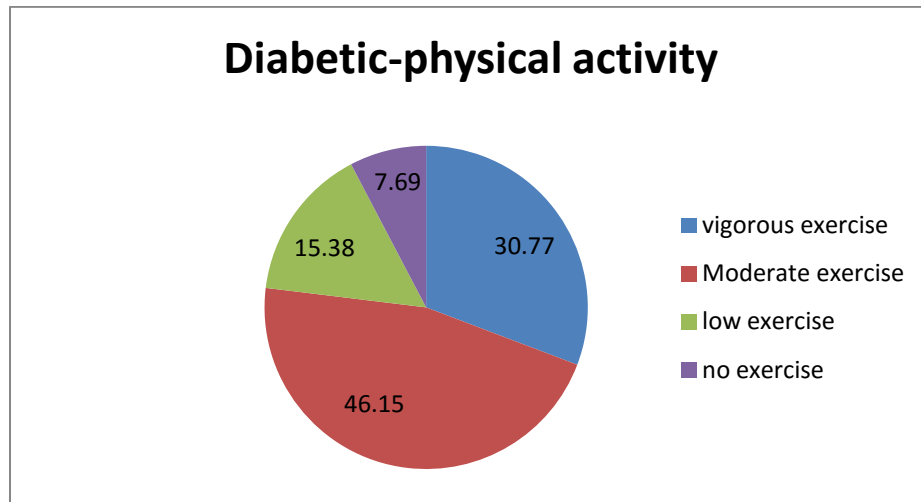


Among 440 population,20-25 aged people are 19.1%, 26-40 aged people are 40.0%, 41-60 aged people are 35.9%, 61-90 aged people are 4.5%.

Table 14: Diabetic-Physical Activity

	Variable	No. of people	Persentage
Diabetic-physical activity	Vigorous exercise	8	30.77
	Moderate exercise	12	46.15
	Low exercise	4	15.38
	No exercise	2	7.69

Figure 14:- Diabetic physical activity of Araneru population

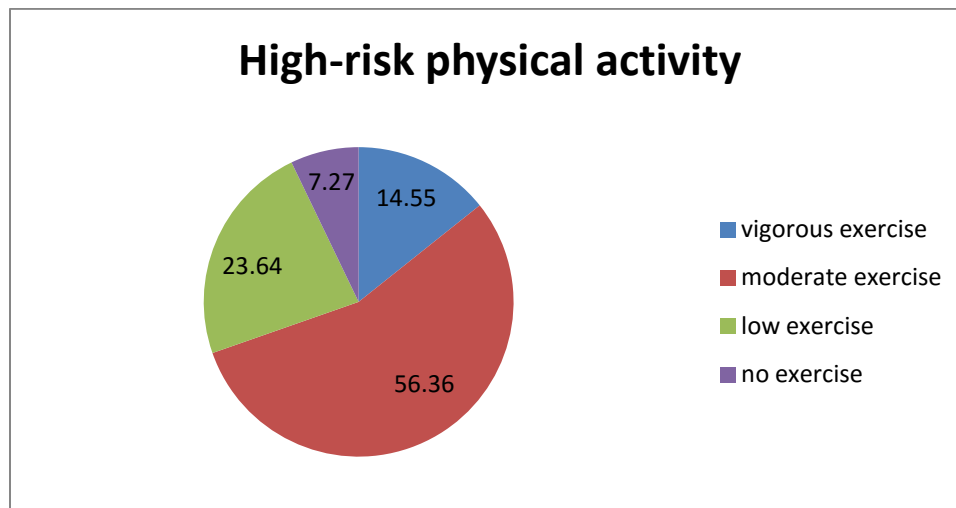


Among 26 people in Diabetic, in it vigorous working people are 30.77%, moderate working people are 46.15%, low working people are 15.38% and no working people 7.69%.

Table 15: High risk Physical Activity

	Variable	No. of people	Percentage
High-risk physical activity	Vigorous exercise	8	14.55
	Moderate exercise	31	56.36
	Low exercise	13	23.64
	No exercise	4	7.24

Figure 15:- High risk physical activity of Araneru population

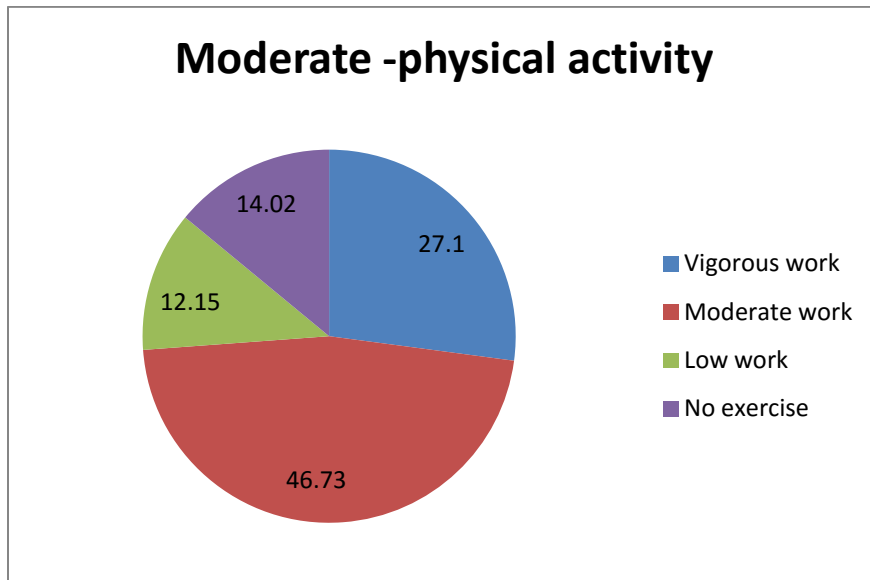


Among 55 High risk physical activity, in that vigorous working people are 14.55%, moderate working people are 56.36%, low working people are 23.64% and no working people 7.27%.

Table 16: Moderate Physical Activity

	Variable	No. of people	Percentage
Moderate physical activity	Vigorous work	58	27.10
	Moderate work	100	46.73
	Low work	26	12.15
	No exercise	30	14.02

Figure 16:- Moderate physical activity of Araneru population



Among 214 High risk physical activity, in that vigorous working people are 27.10%, moderate working people are 46.73%, low working people are 12.15% and no working people 14.02%.

5. DISCUSSION

5.1 SUMMARY:

A survey study was done for the prevalence of type 2 diabetes in Araneru from Sarjaapur rural area Bangalore. In this survey 440 participants with the age group of 20 and above were included. It was found that the overall prevalence of diabetes was 5.90%, and 13.29% of the people are in High Risk for Diabetes, 51.69% of the people are in moderate risk for diabetes and 35.02% of the people are in low risk diabetes.

Studies show that the incidence of diabetes mellitus is very high among south India. The incidence rate of diabetes was 20.2 per 1000 person yearly. (Anjana et al., 2011) Also, it was seen that high prevalence of type 2 diabetes among the adults in Guwahati, Assam, in north eastern part of India. The prevalence was similar to that reported from this study in southern India (8.2% age > 20 yrs.) and Northern India (6.7% age > 30) (Aneja, Datt, Singh, Kumar, & Shan, 2009). The overall self-reported prevalence of chronic conditions was 12, with hypertension (7%) and diabetes (5.8%) being the common conditions (Gowda et al., 2015).

5.2 COMPARISON WITH THE EARLIER STUDY

Global prevalence of type 2 diabetes was 6.4% in 2010. (Shaw, j, esicree.r a. & Zimmet, 2010)

In India prevalence has been studied in four states on type 2 diabetes, 10.4% in Tamilnadu, 8.2% in Maharashtra, 5.3% in Jharkhand, 13.6% in Chandigarh in 2011 (Ramachandran, Jali, Mohan, Snehalatha, & Viswanathan, 2008).

Urban village in Tamilnadu has showed lower prevalence rate (9.2%) of type 2 diabetic in 2008. In Karnataka, the prevalence rate of type 2 diabetic was 10% in Tamaka village, kolar district (Muninarayana, Balachandra, Hiremath, Iyengar, & Anil, 2010) In Karnataka prevalence of diabetes rate of type 2 diabetes was 10% in Tamaka village, kolar district in 2010 (Muninarayana et al., 2010).

There was increasing trend in prevalence rate. They showed that the prevalence of diabetic increased by 3 folds compared that was seen in 2003 when compared with miller study that was done 14 years before. (From 2.2% to 6.36%) (Ramachandran et al., 1988)

TABLE 13: EARLIERSTUDIES

EARLIER STUDIES	PERCENTAGE (%) OF DIABETES	YEAR
Asian population the prevalence of type 2 diabetes.	<ul style="list-style-type: none">• In urban-18.6%.• In rural-9.2%.	2006
In India prevalence has been studied in four states on type 2 diabetes. Tamilnadu, Maharashtra, Jharkhand, Chandigarh.	<ul style="list-style-type: none">• Tamilnadu-10.4%• Maharastra-8.2%• Jharkhand-5.3%• Chandighar-13.6	2011
Urban village in Tamilnadu has showed lower prevalence rate of diabetes.	Tamaka village-10%.	2008
Finding showed the prevalence rate of diabetes in Channenahalli.	Channenahalli-17.2%.	2003
Present study	5.9%	2017

6. CONCLUSION

This study created alertness of diabetes and its complications in rural people of this region. The standard data of the present study concerning the prevalence of T2DM and its related risk factors could be useful for implementation of the National Program for control of Diabetes. Hence, future research in this direction is a necessity of the time. Maximum (i.e. 2/3rd) of diabetics are of age range 40-60 years and almost 2/5 of the diabetics are having family history.

Among the medium risk diabetics almost 2/3 are of the age range 20-40 years. This shows more risk for young generation.

Regular yoga practice can reduce the possibilities due to family history because family history gives only possible tendency. Positive changes in life style, exercise, relaxation and diet can possibly reduce this. Similarly youngsters of medium risk also can avoid getting into problem by adhering to yoga.

7. APPRAISAL

7.1 STRENGTH OF THE STUDY:

This study shows the prevalence of diabetes in rural population. This type of study is useful to create awareness in people on diabetes. For researchers of prevalence studies, the results of this study would provide a substantial base for conducting future trials to know the prevalence of diabetes in other places in Bangalore.

7.2 LIMITATIONS OF THE STUDY:

People who left the village after the Voters list is prepared could not be covered in the survey.

7.3 RECOMMENDATIONS:

Regular yoga classes should be arranged in each urban and rural areas. Get more awareness in youth of town as well as villages about yoga.

Long term follow-up studies on type 2 diabetes prevalence will help to know the prevalence rates and the future action for the prevention, treatment and control of the disease.

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9. APPENDICS

9.1. INFORMED CONSENT

Consent form Information to the participants:

We understand that you are a resident of SWAMI VIVEKANANDA YOGA ANUSANDANA SAMSTHANA village, Araneru, Bangalore. In this study we are evaluating prevalence of type2 diabetes in South Bangalore. Studies show that the how much awareness is in rural areas overall quality of life in type2 diabetics.

Thus this study conduct as a part of the MSC Yoga therapy Degree program, examines the prevalence of type2 diabetes in _____ARANERU_____ AREA. Your consent is sought to take part in the study. If you consent to take part in this study, the investigator will interview you. In this interview, the interviewer will ask you questions related to family health and diabetes. The information collected from you would be helpful in understanding the prevalence of diabetes in _____ARANERU_____AREA. The interview may take half an hour. A part from this interview, if you are observed to have symptoms of pre diabetes. Please note that you have a right to refuse to take part in the study any time. Your refusal will not adversely affect your daily routine. Please also note that the information you are going to divulge to us will be kept in utmost confidentially

Undertaking by the investigator:

If you have any doubts about study please feel free to clarify. Even during the study you are free to contact the investigator for clarifications if you so desire. The phone number of the investigator is given below.

PRIYA JOSHI_____7619414469

Consent: I have been informed about the procedures of the study. The possible risks too have been explained to me as stated in the information. I have understood that I have the right to refuse my consent of withdraw at any time during the study without adversely affecting me. I am

aware that by subjecting to the investigation. I will have to give more time to assessments by the investigator and that these assessments do not interfere with the benefits.

Signature of the participant

Signature of the investigator

9.2 IDRS (Indian diabetic risk score)

	Score
Age	
<35years	0
35-49years	20
>50years	30
Waist circumference:	
Waist<80cm(female),<90cm(male)	0
Waist>80-89cm(female),>90-99cm(male)	10
Waist>90cm(female),>100(male)	20
Physical activity:	
Regular vigorous exercise or strenuous manual activity at home/work	0
Regular moderate exercise or moderate physical activity at home/work	10
Regular mild exercise or mild physical activity at home/work	20
No exercise or sedentary activities at home/work	30
Family history of diabetes	
No diabetes in parents	0
One parent is diabetic	10
Both parents are diabetic	20

FATIGUE SEVERITY SCALE

Date _____ Name _____

Please circle the number between 1 and 7 which you feel best fits the following statements. This refers to your usual way of life within the last week. 1 indicates “strongly disagree” and 7 indicates “strongly agree.”

<i>Read and circle a number.</i>	<i>Strongly Disagree → Strongly</i>						
1. My motivation is lower when I am fatigued.	1	2	3	4	5	6	7
2. Exercise brings on my fatigue.	1	2	3	4	5	6	7
3. I am easily fatigued.	1	2	3	4	5	6	7
4. Fatigue interferes with my physical functioning.	1	2	3	4	5	6	7
5. Fatigue causes frequent problems for me.	1	2	3	4	5	6	7
6. My fatigue prevents sustained physical functioning.	1	2	3	4	5	6	7
7. Fatigue interferes with carrying out certain duties and responsibilities.	1	2	3	4	5	6	7
8. Fatigue is among my most disabling symptoms.	1	2	3	4	5	6	7
9. Fatigue interferes with my work, family, or social life.	1	2	3	4	5	6	7

VISUAL ANALOGUE FATIGUE SCALE (VAFS)

Please mark an “X” on the number line which describes your global fatigue with 0 being worst and 10 being normal.

1	2	3	4	5	6	7	8	9
10								

The Satisfaction with Life Scale

By Ed Diener, Ph.D.

DIRECTIONS: Below are five statements with which you may agree or disagree. Using The 1-7 scale below, indicate your agreement with each item by placing the appropriate Number in the line preceding that item. Please be open and honest in your responding.

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = neither Agree or Disagree

5 = Slightly Agree

6 = Agree

7 = Strongly Agree

_____ 1. In most ways my life is close to my ideal.

_____ 2. The conditions of my life are excellent.

_____ 3. I am satisfied with life.

_____ 4. So far I have gotten the important things I want in life.

_____ 5. If I could live my life over, I would change almost nothing.

The Pittsburgh Sleep Quality Index (PSQI)

Instructions: The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the

Most accurate reply for the majority of days and nights in the past month. Please answer all questions. During the past month,

1. When have you usually gone to bed? _____
2. How long (in minutes) has it taken you to fall asleep each night? _____
3. When have you usually gotten up in the morning? _____
4. How many hours of actual sleep do you get at night? (This may be different than the number of hours you spend in bed) _____

RAW DATA

S.No	REG-ID	Age	Gender	Marital status	Education	Occupation	Diabetic	Physical activities	Waist_C1	IDRS	Height	Weight	Hip_cir	Bp_Sys_	BP_Dia_	Oil
1	KA/BEN/AREN/0 1/01	60	Female	Married	No Formal Education	Household	NO		94	70	163	63	101	153	98	Groundnut
2	KA/BEN/AREN/1 1/30	48	Male	Married	Primary	Sale	No-Exercise		83	70	161	55	89	118	76	Sunflower
3	KA/BEN/AREN/0 1/10	46	Male	Married	Technical Education	Agriculture	Yes	Moderate	95	70	179	75	109	164	66	Groundnut
4	KA/BEN/AREN/1 1/29	38	Female	Married	Primary	Household	NO	Mild	69	20	153	50	86	130	90	Sunflower
5	KA/BEN/AREN/0 1/11	38	Female	Married	High School	Agriculture	NO	Moderate	89	60	153	60	110	117	79	Groundnut
6	KA/BEN/AREN/1 1/26	22	Female	Married	UG	Household	NO	Moderate	77	10	148	48	86	120	78	Sunflower
7	KA/BEN/AREN/0 1/12	60	Male	Married	Secondary	Agriculture	Yes	Vigorous	105	70	170	75	110	169	93	Groundnut
8	KA/BEN/AREN/1 1/25	25	Female	Married	No Formal Education	Agriculture	NO	Vigorous	55	10	145	32	72	110	70	Sunflower
9	KA/BEN/AREN/0 1/13	50	Female	Married	Primary	Household	NO	Moderate	83	70	160	62	104	128	86	Groundnut
10	KA/BEN/AREN/1 1/02	25	Female	Married	Primary	Household	NO	Moderate	68	30	156	38	75	110	64	Sunflower
11	KA/BEN/AREN/0 1/23	52	Male	Married	No Formal Education	Agriculture	NO	Vigorous	100	70	171	75	109	129	76	Groundnut
12	KA/BEN/AREN/1 1/03	30	Male	Married	Primary	Service	NO	Vigorous	69	0	167	48	80	108	81	Sunflower
13	KA/BEN/AREN/0 1/25	48	Female	Married	No Formal Education	Household	NO	Moderate	94	0	161	67	105	114	78	Groundnut
14	KA/BEN/AREN/1 1/08	60	Female	Married	Primary	Household	NO	Mild	75	0	147	46	88	142	84	Sunflower
15	KA/BEN/AREN/0 1/21	42	Male	Married	No Formal Education	Clerical	NO	Vigorous	99	0	162	70	103	134	93	Groundnut
16	KA/BEN/AREN/1 1/09	23	Male	Married	High School	Household	NO	Mild	68	0	163	45	80	120	78	Sunflower
17	KA/BEN/AREN/0 1/18	46	Male	Married	UG	Professional	NO	Moderate	84	0	167	59	97	135	78	Groundnut
18	KA/BEN/AREN/1 1/10	25	Male	Un-Married	High School	Agriculture	NO	Vigorous	82	0	169	59	89	128	68	Sunflower
19	KA/BEN/AREN/0	55	Male	Married	Primary	Agriculture	NO	Vigorous	97	7	171	80	100	120	80	Groundnut

	1/17	9				re	O			0	0	0	7	8	1	dnut
20	KA/BEN/AREN/1 1/13	30	Female	Married	High School	Household	N	Vigorous	85	0	8	4	10	11	7	Sunflower
21	KA/BEN/AREN/0 1/15	43	Male	Married	Secondary	Agriculture	Yes	Moderate	91	0	1	3	96	0	5	Groundnut
22	KA/BEN/AREN/1 1/15	48	Female	Married	No Formal Education	Household	N	Vigorous	77	0	9	7	93	14	6	Sunflower
23	KA/BEN/AREN/0 1/14	25	Female	Married	UG	Household	N	Moderate	90	0	8	5	94	11	7	Groundnut
24	KA/BEN/AREN/1 1/17	28	Male	Married	Primary	Agriculture	N	Vigorous	79	0	3	6	89	13	0	Sunflower
25	KA/BEN/AREN/0 1/09	50	Female	Married	Primary	Sale	N	Moderate	64	0	3	4	87	13	8	Groundnut
26	KA/BEN/AREN/1 1/18	23	Male	Un-Married	PG	Agriculture	N	Vigorous	87	0	7	4	98	13	8	Sunflower
27	KA/BEN/AREN/0 1/07	38	Female	Married	Primary	Agriculture	N	Vigorous	88	0	1	0	6	10	2	Groundnut
28	KA/BEN/AREN/1 1/19	25	Female	Married	Primary	Household	N	Vigorous	66	0	9	4	83	11	7	Sunflower
29	KA/BEN/AREN/0 1/05	52	Female	Married	No Formal Education	Household	N	Vigorous	83	0	9	6	4	12	8	Groundnut
30	KA/BEN/AREN/1 1/21	28	Female	Married	Primary	Household	N	Mild	64	0	8	0	82	11	6	Sunflower
31	KA/BEN/AREN/0 1/03	35	Male	Married	PG	Professional	N	Moderate	93	0	0	8	1	11	6	Groundnut
32	KA/BEN/AREN/1 1/31	60	Male	Married	Primary	Skilled	N	Mild	77	0	1	6	81	1	1	Sunflower
33	KA/BEN/AREN/0 1/02	28	Female	Married	UG	Household	N	Moderate	92	0	6	8	97	10	6	Groundnut
34	KA/BEN/AREN/1 1/28	29	Male	Married	Secondary	Sales	N	No-Exercise	99	0	4	5	7	12	7	Sunflower
35	KA/BEN/AREN/0 1/28	20	Female	Unmarried	Secondary	Clerical	N	Moderate	64	0	1	9	76	1	1	Groundnut
36	KA/BEN/AREN/1 1/27	23	Female	Married	PG	Household	N	No-Exercise	88	0	3	9	0	10	6	Sunflower
37	KA/BEN/AREN/0 1/27	23	Female	Unmarried	Secondary	Clerical	N	Moderate	64	0	4	8	76	10	7	Groundnut
38	KA/BEN/AREN/1 1/24	45	Male	Married	No Formal Education	Agriculture	N	Mild	61	0	6	7	75	12	8	Sunflower
39	KA/BEN/AREN/0 1/26	34	Female	Married	Primary	Agriculture	N	Vigorous	80	0	5	5	88	11	7	Groundnut

40	KA/BEN/AREN/1 1/23	6 0	Male	Married	Primary	Agriculture	N O	Vigorous	90	7 0	16 4	5 2	82	14 8	8 8	Sunflower
41	KA/BEN/AREN/0 1/24	2 7	Male	Married	Technical Education	Agriculture	N O	Vigorous	90	2 0	17 2	6 5	96	16 0	8 2	Groundnut
42	KA/BEN/AREN/1 1/05	3 8	Male	Married	Primary	Unemployed	N O	Mild	65	4 0	16 6	4 5	84	12 3	7 4	Sunflower
43	KA/BEN/AREN/0 1/22	2 8	Male	Married	High School	Agriculture	N O	Vigorous	88	1 0	17 0	5 8	95	11 6	7 9	Groundnut
44	KA/BEN/AREN/1 1/16	6 0	Male	Married	PG	Agriculture	N O	Moderate	75	7 0	16 1	5 0	84	14 4	8 8	Sunflower
45	KA/BEN/AREN/0 1/20	6 0	Male	Married	No Formal Education	Agriculture	N O	Vigorous	86	7 0	16 6	5 3	95	10 4	5 9	Groundnut
46	KA/BEN/AREN/1 1/22	2 9	Male	Married	Ug	Agriculture	N O	Mild	95	4 0	16 1	6 6	95	12 4	8 4	Sunflower
47	KA/BEN/AREN/0 1/19	3 0	Female	Married	UG	Professional	N O	Moderate	88	3 0	16 5	7 3	10 2	10 8	6 9	Groundnut
48	KA/BEN/AREN/1 1/01	5 0	Female	Married	No Formal Education	Household	N O	Mild	81	7 0	15 5	5 0	10 1	14 0	9 4	Sunflower
49	KA/BEN/AREN/0 1/16	2 8	Male	Unmarried	UG	Clerical	N O	Moderate	82	1 0	16 7	5 7	89	12 6	8 3	Groundnut
50	KA/BEN/AREN/1 1/04	5 5	Female	Married	No Formal Education	Agriculture	N O	Vigorous	90	7 0	14 7	5 6	10 1	14 4	0 4	Groundnut
51	KA/BEN/AREN/0 1/08	3 2	Male	Unmarried	Secondary	Professional	N O	Moderate	84	1 0	17 2	6 2	95	19 1	1 6	Groundnut
52	KA/BEN/AREN/1 1/06	5 5	Female	Married	No Formal Education	Household	N O	Moderate	100	7 0	16 7	6 4	10 6	11 4	8 0	Sunflower
53	KA/BEN/AREN/0 1/06	3 8	Male	Married	Primary	Agriculture	N O	Vigorous	87	2 0	16 8	5 3	90	12 4	8 9	Groundnut
54	KA/BEN/AREN/1 1/07	3 9	Female	Married	High School	Household	N O	Mild	85	7 0	16 9	6 4	10 1	12 4	8 4	Sunflower
55	KA/BEN/AREN/0 1/04	5 8	Male	Married	No Formal Education	Agriculture	N O	Vigorous	69	7 0	16 3	4 3	70	11 0	7 1	Groundnut
56	KA/BEN/AREN/1 1/11	4 0	Male	Married	No Formal Education	Agriculture	N O	Mild	90	6 0	17 3	7 4	99	13 4	8 6	Sunflower
57	KA/BEN/AREN/0 2/01	6 2	Female	Married	High School	Household	N O	Moderate	83	6 0	16 3	5 6	10 2	14 6	9 0	Coco nut
58	KA/BEN/AREN/1 1/12	3 5	Male	Married	No Formal Education	Household	N O	Mild	100	7 0	16 0	8 1	11 2	13 0	8 6	Sunflower
59	KA/BEN/AREN/0 2/19	5 2	Female	Married	High School	Household	N O	Moderate	89	7 0	15 5	6 4	10 2	14 0	8 6	Sunflower
60	KA/BEN/AREN/1 1/14	4 5	Female	Married	Ug	Service	Yes	Mild	93	7 0	15 5	7 2	11 1	13 2	8 2	Sunflower

61	KA/BEN/AREN/0 2/20	57	Male	Married	Primary	Sale	Yes	Moderate	93	70	172	57	93	110	82	Sunflower
62	KA/BEN/AREN/1 1/20	53	Female	Married	High School	Household	No	Vigorous	11	70	157	85	21	136	00	Sunflower
63	KA/BEN/AREN/0 2/02	36	Female	Married	No Formal Education	Household	No	Vigorous	80	40	162	54	93	128	84	Sunflower
64	KA/BEN/AREN/1 4/11	66	Male	Married	Primary	Unemployed	Yes	No-Exercise	87	60	153	55	84	153	83	Sunflower
65	KA/BEN/AREN/0 2/08	65	Female	Married	No Formal Education	Household	No	Moderate	80	50	150	48	90	140	86	Sunflower
66	KA/BEN/AREN/1 4/13	41	Male	Married	Ug	Skilled	No	Moderate	10	70	179	95	50	151	97	Sunflower
67	KA/BEN/AREN/0 2/13	27	Male	Unmarried	UG	Service	No	Mild	90	40	172	77	92	142	96	Sunflower
68	KA/BEN/AREN/1 4/02	38	Male	Married	Ug	Business	No	Vigorous	89	40	168	67	95	128	86	Sunflower
69	KA/BEN/AREN/0 2/26	26	Female	Married	Secondary	Household	No	Moderate	10	42	158	81	1	136	90	Sunflower
70	KA/BEN/AREN/1 4/06	30	Female	Married	Primary	Household	No	Moderate	96	40	165	68	02	117	79	Groundnut
71	KA/BEN/AREN/0 2/29	65	Male	Married	High School	Unemployed	No	Mild	72	50	163	35	80	126	80	Sunflower
72	KA/BEN/AREN/1 4/08	63	Female	Married	Primary	Household	No	Moderate	60	40	152	38	81	115	86	others
73	KA/BEN/AREN/0 2/03	23	Female	Unmarried	High School	Clerical	No	Moderate	77	10	150	48	81	116	86	Sunflower
74	KA/BEN/AREN/1 4/13	31	Male	Married	Primary	business	No	Moderate	92	40	166	69	91	137	66	Sunflower
75	KA/BEN/AREN/0 2/04	21	Male	Unmarried	High School	Skilled	No	Mild	84	20	165	71	95	150	86	Sunflower
76	KA/BEN/AREN/1 4/01	27	female	Married	Primary	Unemployed	Yes	Moderate	66	20	155	47	82	120	88	Groundnut
77	KA/BEN/AREN/0 2/05	36	Male	Married	Primary	Skilled	No	Moderate	74	30	164	45	83	160	02	Sunflower
78	KA/BEN/AREN/1 4/03	30	Female	Married	Primary	Household	No	Moderate	70	10	153	58	90	126	86	Groundnut
79	KA/BEN/AREN/0 2/06	32	Female	Married	No Formal Education	Other	No	Moderate	60	10	146	36	76	140	90	Soya bean
80	KA/BEN/AREN/1	26	Female	Married	Primary	Household	No	Moderate	77	14	145	59	91	141	1	Groundnut

	4/04		ale			d	O		4	0	6	5	0	4	0	ndnut
81	KA/BEN/AREN/0 2/07	20	Fem ale	Unmarri ed	High School	Skilled	N O	Mild	5 6	2 0	15 8	3 6	7 4	10 0	7 8	Sunfl ower
82	KA/BEN/AREN/1 4/05	24	Mal e	Un- Married	Technical	Skilled	N O	Moderate	8 0	3 0	16 3	6 3	8 5	13 8	7 6	Grou ndnut
83	KA/BEN/AREN/0 2/09	45	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	7 0	7 0	14 4	4 5	8 8	11 2	8 4	Sunfl ower
84	KA/BEN/AREN/1 4/07	40	Mal e	Married	Primary	Unemploy ed	N O	Moderate	7 7	3 0	16 2	5 4	8 4	13 3	9 8	others
85	KA/BEN/AREN/0 2/10	37	Fem ale	Married	High School	Househol d	N O	Moderate	7 5	3 0	16 0	6 7	9 5	12 0	7 6	Sunfl ower
86	KA/BEN/AREN/1 4/09	23	Fem ale	Un- Married	High School	Househol d	N O	Moderate	7 4	1 0	16 4	4 9	8 8	11 0	8 3	Grou ndnut
87	KA/BEN/AREN/0 2/11	43	Mal e	Married	High School	Agricultur e	N O	Vigorous	8 0	7 0	16 8	5 4	8 5	17 0	0 8	Sunfl ower
88	KA/BEN/AREN/1 4/10	45	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	6 0	7 0	16 0	4 2	7 7	10 0	6 5	Grou ndnut
89	KA/BEN/AREN/0 2/12	45	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	7 0	7 0	15 7	5 2	9 0	15 4	8 0	Sunfl ower
90	KA/BEN/AREN/1 4/12	24	Fem ale	Un- Married	Primary	Househol d	N O	Moderate	8 0	3 0	15 3	5 4	7 0	92	6 7	Sunfl ower
91	KA/BEN/AREN/0 2/14	30	Fem ale	Married	High School	Agricultur e	N O	Vigorous	5 8		14 7	3 9	7 5	98	6 4	Sunfl ower
92	KA/BEN/AREN/1 4/14	48	Mal e	Married	Primary	unskilled	N O	Moderate	8 8	7 0	16 3	6 0	9 1	12 8	7 7	Grou ndnut
93	KA/BEN/AREN/0 2/15	22	Fem ale	Married	Secondary	Househol d	N O	Moderate	6 4	2 0	14 4	3 9	7 6	13 0	7 0	Must ard
94	KA/BEN/AREN/1 4/15	20	Fem ale	Un- Married	Primary	Agricultur e	N O	Vigorous	7 7		17 0	5 8	8 3	12 9	5 1	Grou ndnut
95	KA/BEN/AREN/0 2/16	25	Fem ale	Married	Primary	Agricultur e	N O	Moderate	6 4	1 0	15 0	4 2	7 6	11 4	7 0	Must ard
96	KA/BEN/AREN/1 4/16	22	Fem ale	Married	Primary	unskilled	N O	Moderate	6 1	1 0	17 0	4 4	8 3	14 1	9 2	Grou ndnut
97	KA/BEN/AREN/0 2/17	28	Mal e	Married	High School	Agricultur e	N O	Vigorous	6 7		15 0	4 1	8 2	10 6	7 0	Must ard
98	KA/BEN/AREN/1 4/17	48	Fem ale	Married	Primary	Househol d	N O	Moderate	7 3	7 0	15 7	5 9	8 0	10 5	7 4	Sunfl ower
99	KA/BEN/AREN/0 2/18	26	Mal e	Married	High School	Agricultur e	N O	Vigorous	6 2		16 3	4 3	7 7	10 6	7 5	Must ard
100	KA/BEN/AREN/1 4/18	24	Fem ale	Married	Primary	Househol d	N O	Moderate	8 1	3 0	15 3	6 0	9 4	10 8	6 9	Sunfl ower
101	KA/BEN/AREN/0 2/21	26	Mal e	Unmarri ed	Technical Education	Service	N O	Mild	7 6	2 0	17 2	6 6	9 6	13 2	8 8	Sunfl ower

102	KA/BEN/AREN/1 4/20	26	Male	Married	Primary	Unskilled	N O	Moderate	7 6	1 0	17 0	6 5	8 9	13 0	0 2	1 Sunfl ower
103	KA/BEN/AREN/0 2/22	37	Male	Married	UG	Agricultur e	N O	Vigorous	8 8	3 0	16 9	6 6	0 0	12 6	8 4	1 Sunfl ower
104	KA/BEN/AREN/1 4/22	33	Female	Married	Primary	Unskilled	N O	Mild	7 8	2 0	15 1	5 3	8 8	12 1	8 2	1 Sunfl ower
105	KA/BEN/AREN/0 2/23	32	Female	Married	High School	Service	N O	Moderate	8 3	3 0	15 6	6 4	9 4	13 0	8 8	1 Sunfl ower
106	KA/BEN/AREN/1 4/21	28	Male	Married	Primary	Agricultur e	N O	Vigorous	8 4		17 0	6 5	8 9	13 0	0 2	1 Sunfl ower
107	KA/BEN/AREN/0 2/24	30	Female	Married	High School	Service	N O	Mild	7 6	1 0	14 8	5 6	9 3	10 2	8 2	1 Sunfl ower
108	KA/BEN/AREN/1 5/01	40	male	Married	Primary	Agricultur e	Y es	Mild	9 4	6 0	17 1	7 3	9 3	96	7 0	1 Sunfl ower
109	KA/BEN/AREN/0 2/25	21	Male	Unmarri ed	High School	Skilled	N O	Mild	6 5	2 0	15 7	4 5	8 3	12 2	9 2	1 Sunfl ower
110	KA/BEN/AREN/1 5/02	60	Female	Married	No Formal Education	Unemploy ed	N O	Moderate	9 8	7 0	16 6	6 9	8 0	11 8	7 8	1 Sunfl ower
111	KA/BEN/AREN/0 2/28	24	Male	Unmarri ed	High School	Skilled	N O	Mild	6 9	2 0	16 8	4 6	8 1	13 2	9 0	1 Sunfl ower
112	KA/BEN/AREN/1 5/08	60	Female	Married	Primary	Househol d	Y es	Moderate	7 9	7 0	16 8	6 7	9 4	16 0	9 2	1 Sunfl ower
113	KA/BEN/AREN/0 2/28	34	Male	Married	High School	Skilled	N O	Moderate	7 3	1 0	16 0	4 5	8 5	17 0	1 2	1 Grou ndnut
114	KA/BEN/AREN/1 5/03	38	Female	Married	Primary	Househol d	N O	Moderate	7 7	2 0	15 2	5 9	8 4	14 0	7 8	1 Sunfl ower
115	KA/BEN/AREN/0 2/30	42	Male	Married	High School	Sale	N O	Moderate	8 0	7 0	16 5	5 5	8 8	17 0	0 2	1 Sunfl ower
116	KA/BEN/AREN/1 5/04	29	Female	Married	High School	Househol d	N O	Vigorous	7 7		15 8	5 7	9 0	11 8	7 8	1 Sunfl ower
117	KA/BEN/AREN/0 3/04	60	Male	Married	No Formal Education	Unskilled	N O	Vigorous	1 4	7 0	17 5	7 1	9 6	17 0	0 0	1 Sunfl ower
118	KA/BEN/AREN/1 5/05	20	Female	Un- Married	High School	unskilled	N O	Moderate	6 2	1 0	15 5	4 8	8 0	12 5	7 4	1 Sunfl ower
119	KA/BEN/AREN/0 3/09	35	Male	Married	High School	Agricultur e	N O	Moderate	9 7	7 0	17 2	8 0	9 9	15 1	0 9	1 Sunfl ower

120	KA/BEN/AREN/1 5/09	20	Fem ale	Un- Married	High School	Unemploy ed	N O	Mild	6 0	2 0	15 2	4 2	7 6	11 4	8 6	Sunfl ower
121	KA/BEN/AREN/0 3/01	35	Fem ale	Married	UG	Househol d	N O	Moderate	8 7	5 0	15 0	5 3	8 3	10 6	7 8	Soya bean
122	KA/BEN/AREN/1 5/10	26	Mal e	Un- Married	Pg	Unemploy ed	N O	Vigorous	8 4		16 3	6 6	9 3	14 6	8 8	Sunfl ower
123	KA/BEN/AREN/0 3/06	38	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	8 2	5 0	15 8	6 4	0 4	13 6	9 4	Soya bean
124	KA/BEN/AREN/1 5/11	21	Fem ale	Married	Primary	Househol d	N O	Moderate	8 2	3 0	14 5	4 6	9 0		5 98	Sunfl ower
125	KA/BEN/AREN/0 3/08	24	Mal e	Unmarri ed	UG	Sale	N O	Mild	9 6	4 0	18 7	9 8	0 8	13 0	7 8	Sunfl ower
126	KA/BEN/AREN/1 5/12	48	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	6 2	7 0	14 2	4 3	6 8		7 96	Sunfl ower
127	KA/BEN/AREN/0 3/16	45	Fem ale	Married	No Formal Education	Skilled	N O	Moderate	7 2	7 0	15 1	4 4	8 4	12 2	9 4	Sunfl ower
128	KA/BEN/AREN/1 5/13	65	Mal e	Married	Primary	Agricultur e	N O	Vigorous	7 0	3 0	16 1	4 5	8 1	14 4	9 4	Sunfl ower
129	KA/BEN/AREN/0 3/20	40	Mal e	Married	UG	Clerical	N O	Moderate	9 4	5 0	17 5	7 8	0 2	12 0	8 8	Sunfl ower
130	KA/BEN/AREN/1 5/17	32	Fem ale	Married	Ug	Househol d	N O	Moderate	7 8	1 0	16 2	6 7	8 5	12 4	8 2	Sunfl ower
131	KA/BEN/AREN/0 3/02	26	Fem ale	Married	High School	Househol d	N O	Vigorous	7 9	1 0	16 2	6 3	8 5	13 0	8 8	Sunfl ower
132	KA/BEN/AREN/1 5/18	22	Fem ale	Un- Married	High School	Profession al	N O	Mild	7 4	2 0	15 9	6 0	9 3		7 96	Sunfl ower
133	KA/BEN/AREN/0 3/03	35	Mal e	Married	High School	Agricultur e	N O	Vigorous	7 9	2 0	17 3	7 8	7 9	13 8	8 4	Sunfl ower
134	KA/BEN/AREN/1 5/19	60	Mal e	Married	No Formal Education	Medium business	N O	Vigorous	8 0	7 0	15 8	4 4	8 3		6 92	soya bean
135	KA/BEN/AREN/0 3/05	38	Mal e	Married	UG	Skilled	Y es	Moderate	8 4	3 0	17 1	6 4	8 4	12 4	9 0	Sunfl ower
136	KA/BEN/AREN/1 5/20	60	Mal e	Married	No Formal Education	Profession al	N O	Vigorous	7 2	7 0	15 6	4 8	8 5	12 0	7 4	Sunfl ower
137	KA/BEN/AREN/0 3/07	26	Fem ale	Married	Technical Education	Househol d	N O	Moderate	9 5	4 0	17 3	6 6	0 5	11 6	8 8	Sunfl ower
138	KA/BEN/AREN/1 5/21	33	Mal e	Un- Married	Primary	Clerical	N O	Vigorous	7 4		16 8	5 0	8 3	10 6	7 6	Sunfl ower

139	KA/BEN/AREN/0 3/10	29	Male	Married	UG	Skilled	N O	Moderate	8 6	1 0	17 0	6 5	9 5	12 6	8 6	Sunflower
140	KA/BEN/AREN/1 5/22	60	Male	Married	Primary	Agriculture	N O	Vigorous	9 1	7 0	17 8	6 3	8 7	17 8	1 0	Sunflower
141	KA/BEN/AREN/0 3/11	26	Male	Unmarried	Secondary	Unskilled	N O	Moderate	8 0	1 0	16 6	6 5	9 1	11 8	6 8	Sunflower
142	KA/BEN/AREN/1 5/23	47	Male	Married	High School	Agriculture	N O	Vigorous	7 1	7 0	16 6	5 1	8 5	12 6	8 4	Sunflower
143	KA/BEN/AREN/0 3/12	29	Male	Married	Secondary	Skilled	N O	Moderate	9 2	3 0	16 6	7 5	9 6	13 4	8 0	Sunflower
144	KA/BEN/AREN/1 5/25	25	Male	Married	Technical	Clerical	N O	Moderate	8 5	1 0	17 4	7 7	9 6	12 8	8 8	Sunflower
145	KA/BEN/AREN/0 3/13	38	Male	Married	No Formal Education	Agriculture	N O	Vigorous	7 4	2 0	15 8	4 9	8 2	12 2	7 8	Sunflower
146	KA/BEN/AREN/1 5/26	23	Male	Married	Pg	professional	N O	Moderate	9 0	1 0	15 3	4 8	8 9	10 6	6 8	Sunflower
147	KA/BEN/AREN/0 3/14	26	Male	Married	UG	Unemployed	N O	Moderate	9 2	3 0	18 2	8 0	9 9	15 6	9 3	Sunflower
148	KA/BEN/AREN/1 5/27	35	Male	Married	Primary	Household	N O	Moderate	6 8	3 0	14 9	4 5	8 5	15 6	8 2	Groupndnut
149	KA/BEN/AREN/0 3/15	30	Male	Unmarried	High School	Skilled	N O	Moderate	8 8	1 0	16 6	7 5	9 0	11 2	6 8	Sunflower
150	KA/BEN/AREN/1 5/28	32	Male	Un-Married	Primary	unskilled	N O	Moderate	8 0	1 0	17 1	6 4	8 6	13 9	8 2	Groupndnut
151	KA/BEN/AREN/0 3/17	28	Male	Married	Secondary	Sale	N O	Moderate	8 7	1 0	19 0	6 7	9 0	14 6	8 8	Sunflower
152	KA/BEN/AREN/1 5/06	32	Female	Married	Primary	unskilled	N O	Moderate	8 1	4 0	16 0	7 8	0 6	11 6	8 0	Sunflower
153	KA/BEN/AREN/0 3/18	20	Male	Unmarried	UG	Unemployed	N O	Moderate	7 5	1 0	16 5	5 5	9 0	14 8	8 0	Sunflower
154	KA/BEN/AREN/1 5/07	50	Female	Married	Primary	Household	N O	Moderate	8 3	7 0	15 3	6 3	0 3	16 8	9 0	Sunflower
155	KA/BEN/AREN/0 3/19	21	Male	Married	UG	Unemployed	N O	Moderate	7 8	1 0	16 6	6 5	9 3	13 4	8 4	Sunflower
156	KA/BEN/AREN/1 5/14	50	Female	Married	No Formal Education	Household	N O	Moderate	7 5	7 0	14 5	5 3	9 0	12 0	7 8	Sunflower
157	KA/BEN/AREN/0 4/01	60	Female	Married	Primary	Unemployed	Y es	Mild	9 9	7 0	15 0	5 4	8 5	13 4	9 0	Sunflower
158	KA/BEN/AREN/1 5/15	45	Female	Married	Primary	unskilled	N O	Vigorous	8 0	7 0	14 3	5 3	9 7	11 8	8 0	Sunflower

159	KA/BEN/AREN/0 4/03	50	Male	Married	No Formal Education	Agriculture	NO	Moderate	94	70	164	50	85	120	72	Sunflower
160	KA/BEN/AREN/1 5/16	48	Male	Married	Primary	Agriculture	NO	Vigorous	91	70	164	63	94	130	88	Sunflower
161	KA/BEN/AREN/0 4/04	39	Male	Married	Secondary	Clerical	NO	Exercise	102	80	164	78	94	133	98	Sunflower
162	KA/BEN/AREN/1 5/24	67	Male	Married	Primary	Unskilled	NO	Mild	96	50	168	80	08	144	90	Groundnut
163	KA/BEN/AREN/0 4/08	48	Female	Married	High School	Household	NO	Moderate	108	70	160	71	92	117	133	Sunflower
164	KA/BEN/AREN/1 5/29	64	Male	Married	Primary	Agriculture	NO	Vigorous	94	50	174	68	93	152	92	Sunflower
165	KA/BEN/AREN/0 4/11	48	Female	Married	No Formal Education	Household	NO	Mild	84	70	135	51	01	128	95	Sunflower
166	KA/BEN/AREN/1 5/30	22	Male	Un-Married	Primary	Business	NO	Vigorous	69	02	176	63	77	158	90	Sunflower
167	KA/BEN/AREN/0 4/02	60	Male	Married	Primary	Sale	NO	Exercise	84	70	163	47	77	180	100	Sunflower
168	KA/BEN/AREN/0 4/07	49	Female	Married	No Formal Education	Household	NO	Mild	57	70	160	65	76	144	96	Sunflower
169	KA/BEN/AREN/0 4/05	21	Male	Unmarried	Secondary	Unemployed	NO	Exercise	80	30	167	53	93	118	75	Sunflower
170	KA/BEN/AREN/0 4/06	32	Female	Married	High School	Sale	NO	Moderate	44	10	168	81	63	119	90	Sunflower
171	KA/BEN/AREN/0 4/09	25	Male	Unmarried	Primary	Skilled	NO	Moderate	97	30	178	83	93	123	92	Sunflower
172	KA/BEN/AREN/0 4/10	28	Female	Married	Secondary	Household	NO	Moderate	56	03	130	60	90	117	92	Sunflower
173	KA/BEN/AREN/0 4/12	32	Female	Married	Secondary	Household	NO	Moderate	105	04	152	82	21	131	83	Sunflower
174	KA/BEN/AREN/0 4/13	38	Male	Married	Primary	Agriculture	NO	Vigorous	95	20	168	65	92	133	90	Sunflower
175	KA/BEN/AREN/0 4/14	25	Male	Unmarried	High School	Skilled	NO	Vigorous	84	02	176	65	92	126	77	Sunflower
176	KA/BEN/AREN/0 4/15	22	Male	Unmarried	Technical Education	Sale	NO	Mild	90	20	168	64	02	120	80	Sunflower
177	KA/BEN/AREN/0 4/16	23	Male	Unmarried	High School	Sale	NO	Mild	85	03	152	62	98	123	70	Sunflower

178	KA/BEN/AREN/0 4/17	35	Male	Married	Primary	Sale	NO	Moderate	80	10	153	68	95	123	89	Sunflower
179	KA/BEN/AREN/0 4/18	28	Female	Married	Primary	Household	NO	Moderate	78	10	155	65	05	115	98	Sunflower
180	KA/BEN/AREN/0 4/19	49	Male	Married	Primary	Agriculture	NO	Vigorous	85	70	164	63	91	120	90	Sunflower
181	KA/BEN/AREN/0 4/20	20	Male	Unmarried	Technical Education	Unemployed	NO	Mild	77	20	167	57	85	135	83	Sunflower
182	KA/BEN/AREN/0 4/21	42	Male	Married	No Formal Education	Agriculture	NO	Vigorous	95	70	160	68	98	126	93	Sunflower
183	KA/BEN/AREN/0 5/04	59	Male	Married	Primary	Professional	NO	Moderate	99	70	161	71	95	142	90	Sunflower
184	KA/BEN/AREN/0 5/05	53	Female	Married	Secondary	Household	NO	Moderate	80	70	152	47	68	108	76	Sunflower
185	KA/BEN/AREN/0 5/09	62	Female	Married	No Formal Education	Unemployed	Yes	Moderate	103	70	148	64	98	184	98	Sunflower
186	KA/BEN/AREN/0 5/18	59	Female	Married	Primary	Household	NO	Moderate	95	70	152	51	80	132	98	Sunflower
187	KA/BEN/AREN/0 5/31	49	Male	Married	Primary	Professional	NO	Moderate	108	70	168	82	00	134	88	Sunflower
188	KA/BEN/AREN/0 5/32	43	Male	Married	Primary	Unskilled	NO	Moderate	100	70	165	76	96	113	74	Sunflower
189	KA/BEN/AREN/0 5/01	60	Male	Married	High School	Unemployed	NO	Vigorous	82	70	146	39	81	110	60	Sunflower
190	KA/BEN/AREN/0 5/07	32	Male	Married	High School	Other	NO	Moderate	103	40	162	82	92	131	98	Sunflower
191	KA/BEN/AREN/0 5/08	42	Female	Married	Primary	Agriculture	NO	Vigorous	85	70	141	75	96	130	86	Sunflower
192	KA/BEN/AREN/0 5/17	40	Female	Married	No Formal Education	Household	NO	Moderate	88	50	156	50	72	100	66	Mustard
193	KA/BEN/AREN/0 5/19	37	Male	Married	No Formal Education	Unskilled	NO	Vigorous	107	50	167	78	100	132	56	Sunflower
194	KA/BEN/AREN/0 5/20	36	Male	Married	Primary	Skilled	NO	Vigorous	107	50	171	80	100	120	76	Sunflower
195	KA/BEN/AREN/0 5/23	37	Male	Married	High School	Professional	NO	Moderate	97	50	165	65	90	136	90	Sunflower

196	KA/BEN/AREN/0 5/25	26	Fem ale	Married	No Formal Education	Service	N O	Moderate	9 0	4 0	14 9	5 0	7 3	10 8	7 8	Sunfl ower
197	KA/BEN/AREN/0 5/02	40	Mal e	Married	Secondary	Agricultur e	N O	Moderate	8 7	3 0	16 2	5 7	7 4	12 8	8 4	Sunfl ower
198	KA/BEN/AREN/0 5/03	32	Fem ale	Married	Primary	Househol d	N O	Moderate	7 4	2 0	15 0	4 6	7 6	11 8	8 8	Sunfl ower
199	KA/BEN/AREN/0 5/06	55	Mal e	Married	Primary	Agricultur e	N O	Vigorous	8 5	7 0	16 8	6 5	8 0	13 6	8 4	Sunfl ower
200	KA/BEN/AREN/0 5/10	32	Fem ale	Married	Primary	Househol d	N O	Moderate	8 6	3 0	14 2	5 7	0 2	13 6	9 4	Sunfl ower
201	KA/BEN/AREN/0 5/11	20	Fem ale	Unmarri ed	High School	Other	N O	Moderate	8 2	3 0	15 3	4 2	6 8	12 0	8 2	Sunfl ower
202	KA/BEN/AREN/0 5/12	22	Fem ale	Married	UG	Househol d	N O	Moderate	8 8	3 0	15 0	4 6	7 8	10 6	7 4	Sunfl ower
203	KA/BEN/AREN/0 5/13	21	Fem ale	Unmarri ed	High School	Other	N O	Moderate	8 0	4 0	15 0	4 1	6 7	12 8	8 6	Sunfl ower
204	KA/BEN/AREN/0 5/14	26	Fem ale	Married	No Formal Education	Unemploy ed	N O	Moderate	6 8	1 0	14 0	4 1	8 4	12 4	8 0	Must ard
205	KA/BEN/AREN/0 5/15	36	Mal e	Married	High School	Agricultur e	N O	Vigorous	8 8		15 9	5 5	8 3	13 7	9 6	Must ard
206	KA/BEN/AREN/0 5/16	45	Mal e	Married	No Formal Education	Agricultur e	N O	Vigorous	8 7	7 0	16 1	5 0	7 3	11 4	7 7	Must ard
207	KA/BEN/AREN/0 5/21	35	Fem ale	Married	Primary	Agricultur e	N O	Vigorous	7 8	2 0	14 4	4 6	6 6	12 6	7 9	Sunfl ower
208	KA/BEN/AREN/0 5/22	25	Fem ale	Married	Primary	Service	N O	Moderate	8 2	3 0	15 1	4 3	7 2	14 4	0 2	Sunfl ower
209	KA/BEN/AREN/0 5/24	24	Fem ale	Married	Secondary	Service	N O	Moderate	7 2	1 0	15 1	3 5	5 5	11 2	8 0	Sunfl ower
210	KA/BEN/AREN/0 5/26	20	Fem ale	Married	No Formal Education	Service	N O	Vigorous	7 1		14 8	3 4	5 8	10 0	6 5	Sunfl ower
211	KA/BEN/AREN/0 5/27	34	Mal e	Married	High School	Service	N O	Vigorous	9 2	3 0	16 9	5 9	7 9	13 8	8 4	Sunfl ower
212	KA/BEN/AREN/0 5/28	24	Fem ale	Married	Secondary	Househol d	N O	Moderate	8 2	3 0	14 7	4 7	6 8	10 8	8 0	Sunfl ower
213	KA/BEN/AREN/0 5/29	29	Fem ale	Married	No Formal Education	Service	N O	Vigorous	8 0	2 0	15 4	4 2	6 4	17 2	8 0	Sunfl ower
214	KA/BEN/AREN/0 5/30	31	Mal e	Married	Secondary	Service	N O	Vigorous	8 3	2 0	16 6	5 1	7 8	11 2	8 6	Sunfl ower
215	KA/BEN/AREN/0 5/33	31	Mal e	Married	Secondary	Service	N O	Vigorous	7 7		15 5	4 2	6 7	13 2	7 8	Sunfl ower
216	KA/BEN/AREN/0 5/34	24	Mal e	Unmarri ed	Secondary	Skilled	N O	Moderate	9 9	3 0	16 7	7 0	8 6	13 6	8 8	Sunfl ower

217	KA/BEN/AREN/0 5/35	30	Male	Married	No Formal Education	Service	N O	Vigorous	9 0	2 0	17 1	5 8	6 6	12 4	7 6	Sunfl ower
218	KA/BEN/AREN/0 6/14	50	Male	Married	High School	Agricultur e	Y es	Vigorous	9 0	7 0	16 6	6 3	9 2	14 8	9 8	Sunfl ower
219	KA/BEN/AREN/0 6/02	35	Female	Married	High School	Househol d	N O	Moderate	1 0	7 0	14 7	6 0	0 2	13 3	8 8	Sunfl ower
220	KA/BEN/AREN/0 6/03	40	Female	Married	Primary	Househol d	N O	Moderate	8 9	6 0	14 6	5 2	9 6	12 6	8 6	Sunfl ower
221	KA/BEN/AREN/0 6/08	53	Female	Married	High School	Househol d	N O	Moderate	1 0	7 0	15 6	7 5	1 2	16 6	0 8	Sunfl ower
222	KA/BEN/AREN/0 6/01	51	Male	Married	UG	Agricultur e	Y es	Vigorous	9 4	7 0	16 5	7 0	9 6	18 4	0 0	Sunfl ower
223	KA/BEN/AREN/0 6/05	47	Female	Married	High School	Househol d	N O	Moderate	8 4	7 0	14 9	4 4	8 4	13 8	0 0	Sunfl ower
224	KA/BEN/AREN/0 6/13	45	Female	Married	High School	Househol d	N O	Moderate	5 8	7 0	15 0	6 8	6 3	14 2	0 0	Sunfl ower
225	KA/BEN/AREN/0 6/16	45	Male	Married	UG	Agricultur e	N O	Vigorous	9 7	7 0	16 7	7 2	9 6	14 8	9 4	Sunfl ower
226	KA/BEN/AREN/0 6/04	52	Male	Married	UG	Agricultur e	N O	Vigorous	9 4	7 0	16 4	6 3	9 6	13 4	1 6	Sunfl ower
227	KA/BEN/AREN/0 6/06	22	Male	Unmarri ed	Technical Education	Unemploy ed	N O	NO Exercise	8 1	3 0	16 9	6 4	8 6	11 0	8 4	Sunfl ower
228	KA/BEN/AREN/0 6/07	24	Female	Unmarri ed	PG	Unemploy ed	N O	NO Exercise	7 1	3 0	15 1	5 5	8 6	13 2	8 0	Sunfl ower
229	KA/BEN/AREN/0 6/09	42	Female	Married	High School	Househol d	N O	Moderate	7 6	7 0	14 8	5 0	9 1	13 0	9 6	Sunfl ower
230	KA/BEN/AREN/0 6/10	29	Female	Married	UG	Househol d	N O	Moderate	8 5	3 0	15 1	5 8	9 6	11 6	8 0	Sunfl ower
231	KA/BEN/AREN/0 6/11	24	Female	Married	PG	Househol d	N O	Moderate	7 7	2 0	16 3	5 4	9 7	11 4	6 2	Sunfl ower
232	KA/BEN/AREN/0 6/12	46	Male	Married	Secondary	Agricultur e	N O	Vigorous	8 6	7 0	17 4	6 5	9 2	13 0	9 0	Sunfl ower
233	KA/BEN/AREN/0 6/15	55	Male	Married	Secondary	Agricultur e	N O	Vigorous	7 5	7 0	16 5	5 0	8 0	11 2	7 8	Sunfl ower
234	KA/BEN/AREN/0 6/17	43	Male	Married	High School	Agricultur e	Y es	Vigorous	9 5	7 0	17 0	7 4	9 8	13 4	9 4	Sunfl ower

235	KA/BEN/AREN/0 6/18	34	Male	Married	High School	Agriculture	NO	Vigorous	17	13	7	1	1	14	9	Sunflower
236	KA/BEN/AREN/0 7/01	45	Female	Married	Primary	Household	YES	Moderate	15	7	2	5	7	11	8	Sunflower
237	KA/BEN/AREN/0 7/02	55	Male	Married	No Formal Education	Agriculture	NO	Vigorous	18	8	9	14	0	5	2	Sunflower
238	KA/BEN/AREN/0 7/09	28	Male	Married	Technical Education	Skilled	NO	Exercise	16	7	9	11	8	4	7	Sunflower
239	KA/BEN/AREN/0 7/11	54	Male	Married	No Formal Education	Agriculture	YES	Vigorous	13	8	0	15	0	5	2	Sunflower
240	KA/BEN/AREN/0 7/03	43	Female	Married	Secondary	Agriculture	NO	Vigorous	16	6	8	12	9	8	2	Sunflower
241	KA/BEN/AREN/0 7/04	56	Male	Married	Primary	Agriculture	YES	Vigorous	12	6	9	12	8	4	5	Sunflower
242	KA/BEN/AREN/0 7/05	48	Female	Married	Primary	Household	NO	Vigorous	15	6	0	11	8	6	8	Sunflower
243	KA/BEN/AREN/0 7/07	80	Female	Married	No Formal Education	Agriculture	NO	Moderate	15	4	8	17	1	8	8	Sunflower
244	KA/BEN/AREN/0 7/10	42	Male	Married	High School	Agriculture	NO	Vigorous	17	9	1	11	8	5	9	Sunflower
245	KA/BEN/AREN/0 7/12	23	Female	Married	No Formal Education	Household	NO	Moderate	15	7	1	13	9	5	6	Other
246	KA/BEN/AREN/0 7/14	36	Male	Married	High School	Agriculture	NO	Vigorous	14	6	8	13	8	0	7	Other
247	KA/BEN/AREN/0 7/17	53	Male	Married	No Formal Education	Agriculture	NO	Vigorous	16	6	8	12	9	7	3	Sunflower
248	KA/BEN/AREN/0 7/18	47	Male	Married	Primary	Clerical	NO	Moderate	17	7	9	13	8	7	8	Sunflower
249	KA/BEN/AREN/0 7/19	57	Female	Married	No Formal Education	Household	NO	Moderate	15	3	8	14	7	2	9	Sunflower
250	KA/BEN/AREN/0 7/06	33	Male	Unmarried	Primary	Skilled	NO	Moderate	16	7	0	12	8	8	8	Sunflower
251	KA/BEN/AREN/0 7/08	34	Female	Married	Primary	Household	NO	Moderate	15	5	7	10	7	9	9	Soya bean

252	KA/BEN/AREN/0 7/13	20	Fem ale	Unmarri ed	PG	Other	N O	Moderate	6 0	2 0	16 1	4 5	8 5	12 0	8 8	Sunfl ower
253	KA/BEN/AREN/0 7/15	28	Mal e	Married	High School	Agricultur e	N O	Vigorous	8 4	1 0	17 6	5 4	8 7	11 9	8 8	Other
254	KA/BEN/AREN/0 7/16	50	Mal e	Married	Primary	Agricultur e	N O	Vigorous	6 9	7 0	13 0	6 9	7 1	13 0	9 1	Coco nut
255	KA/BEN/AREN/0 8/04	53	Mal e	Married	UG	Agricultur e	Y es	Moderate	1 0	7 0	16 7	8 2	0 7	14 4	0 1	Sunfl ower
256	KA/BEN/AREN/0 8/05	45	Fem ale	Married	Secondary	Househol d	N O	Moderate	8 3	7 0	14 9	5 3	9 3	17 7	9 4	Sunfl ower
257	KA/BEN/AREN/0 8/16	60	Fem ale	Married	No Formal Education	Agricultur e	N O	Moderate	1 0	7 0	15 6	6 6	0 2	13 2	7 4	Sunfl ower
258	KA/BEN/AREN/0 8/21	55	Fem ale	Married	No Formal Education	Agricultur e	N O	Moderate	9 3	7 0	16 6	6 5	0 4	16 8	0 8	Sunfl ower
259	KA/BEN/AREN/0 8/27	59	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	8 7	7 0	14 4	5 5	0 0	14 2	9 2	Sunfl ower
260	KA/BEN/AREN/0 8/02	23	Mal e	Unmarri ed	UG	Unskilled	N O	NO Exercise	8 3	4 0	19 0	8 0	0 4	13 3	1 4	Sunfl ower
261	KA/BEN/AREN/0 8/03	42	Fem ale	Married	Primary	Househol d	N O	Mild	9 0	7 0	16 3	8 0	1 0	15 6	9 9	Sunfl ower
262	KA/BEN/AREN/0 8/06	26	Mal e	Unmarri ed	Technical Education	Agricultur e	N O	Mild	9 9	5 0	17 6	8 5	0 7	14 3	9 4	Sunfl ower
263	KA/BEN/AREN/0 8/09	62	Fem ale	Married	Primary	Househol d	Y es	Mild	8 7	5 0	15 0	6 0	0 7	13 1	9 3	Sunfl ower
264	KA/BEN/AREN/0 8/11	48	Fem ale	Married	Primary	Househol d	N O	Moderate	9 9	7 0	15 0	6 3	8 8	14 0	0 0	Sunfl ower
265	KA/BEN/AREN/0 8/12	23	Fem ale	Married	Primary	Househol d	N O	Moderate	9 8	4 0	15 3	5 4	0 1	12 4	8 6	Sunfl ower
266	KA/BEN/AREN/0 8/13	40	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	8 6	5 0	14 7	6 2	0 2	12 8	9 2	Sunfl ower
267	KA/BEN/AREN/0 8/15	37	Mal e	Married	Primary	Agricultur e	N O	Vigorous	9 9	4 0	17 8	8 8	0 6	15 2	9 8	Sunfl ower

268	KA/BEN/AREN/0 8/22	65	Fem ale	Married	Primary	Househol d	N O	Moderate	7 6	4 0	15 7	5 7	9 2	15 4	9 0	Sunfl ower
269	KA/BEN/AREN/0 8/01	51	Mal e	Married	Primary	Agricultur e	Y es	Vigorous	9 6	7 0	16 7	6 7	9 7	11 2	8 5	Sunfl ower
270	KA/BEN/AREN/0 8/07	25	Fem ale	Unmarri ed	UG	Unskilled	N O	Mild	6 0	3 0	15 3	4 4	7 9	11 9	8 5	Sunfl ower
271	KA/BEN/AREN/0 8/08	24	Fem ale	Married	High School	Househol d	N O	Mild	7 0	2 0	15 7	8 5	8 8	97	7 0	Sunfl ower
272	KA/BEN/AREN/0 8/10	56	Mal e	Married	Primary	Agricultur e	N O	Vigorous	8 5	7 0	18 0	6 1	9 0	13 8	9 4	Sunfl ower
273	KA/BEN/AREN/0 8/14	45	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	7 4	7 0	15 8	5 6	9 4	11 8	7 8	Sunfl ower
274	KA/BEN/AREN/0 8/17	21	Fem ale	Married	High School	Househol d	N O	Moderate	7 9	1 0	16 2	6 0	9 5	10 8	7 0	Sunfl ower
275	KA/BEN/AREN/0 8/18	34	Fem ale	Married	Primary	Househol d	N O	Moderate	8 4	3 0	15 5	6 5	0 2	12 4	9 6	Sunfl ower
276	KA/BEN/AREN/0 8/19	30	Mal e	Married	Primary	Agricultur e	N O	Vigorous	7 9		18 1	6 5	9 2	12 6	8 0	Sunfl ower
277	KA/BEN/AREN/0 8/20	40	Mal e	Married	No Formal Education	Agricultur e	N O	Vigorous	7 7	2 0	16 3	5 5	8 8	12 4	8 4	Sunfl ower
278	KA/BEN/AREN/0 8/23	62	Mal e	Married	High School	Agricultur e	N O	Vigorous	7 9	3 0	15 8	4 9	8 5	13 6	8 8	Soya bean
279	KA/BEN/AREN/0 8/24	48	Fem ale	Married	Primary	Househol d	N O	Moderate	6 8	7 0	15 6	5 0	8 6	11 4	7 2	Sunfl ower
280	KA/BEN/AREN/0 8/25	55	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 9	7 0	17 0	5 6	8 9	13 4	9 2	Sunfl ower
281	KA/BEN/AREN/0 8/26	30	Fem ale	Married	High School	Unskilled	N O	Vigorous	8 5		16 4	6 4	9 8	11 2	7 4	Sunfl ower
282	KA/BEN/AREN/0 8/28	20	Mal e	Unmarri ed	High School	Agricultur e	N O	Vigorous	9 2		18 8	6 1	7 2	15 0	8 2	Sunfl ower
283	KA/BEN/AREN/0 8/29	26	Mal e	Married	Primary	Agricultur e	N O	Vigorous	7 8		16 4	5 7	8 4	13 2	8 8	Sunfl ower
284	KA/BEN/AREN/0 9/01	55	Mal e	Married	High School	Agricultur e	N O	Vigorous	1 0	7 0	15 9	8 2	9 8	13 2	8 7	Sunfl ower
285	KA/BEN/AREN/0 9/02	48	Fem ale	Married	Secondary	Househol d	N O	Moderate	1 1	7 0	15 1	6 8	0 8	13 9	7 9	Sunfl ower
286	KA/BEN/AREN/0 9/04	43	Fem ale	Married	High School	Househol d	Y es	Moderate	1 0	7 0	13 9	6 8	1 2	12 8	9 0	Sunfl ower

287	KA/BEN/AREN/0 9/08	52	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	8 5	7 0	13 4	4 9	0 4	12 6	7 0	Sunfl ower
288	KA/BEN/AREN/0 9/03	52	Mal e	Married	High School	Agricultur e	N O	Vigorous	9 5	7 0	15 4	6 3	9 3	13 6	8 6	Sunfl ower
289	KA/BEN/AREN/0 9/05	40	Mal e	Married	Technical Education	Agricultur e	N O	Vigorous	9 5	5 0	16 3	7 7	0 6	15 9	9 3	Sunfl ower
290	KA/BEN/AREN/0 9/09	25	Fem ale	Married	PG	Other	N O	Moderate	9 4	4 0	14 5	5 3	0 7		7 94	Sunfl ower
291	KA/BEN/AREN/0 9/11	45	Mal e	Married	High School	Agricultur e	Y es	Vigorous	1 0 8	5 0	16 5	7 3	0 8	13 7	9 6	Sunfl ower
292	KA/BEN/AREN/0 9/12	42	Fem ale	Married	High School	Househol d	N O	Moderate	8 4	5 0	15 6	7 5	0 9	12 8	8 6	Sunfl ower
293	KA/BEN/AREN/0 9/14	27	Fem ale	Married	Secondary	Househol d	N O	Moderate	9 2	4 0	15 5	7 3	1 6	11 7	6 8	Sunfl ower
294	KA/BEN/AREN/0 9/18	45	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	9 2	5 0	14 9	5 5	0 6	13 4	9 7	Sunfl ower
295	KA/BEN/AREN/0 9/20	45	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 5	2 0	15 2	4 9	0 6	10 1	7 2	Sunfl ower
296	KA/BEN/AREN/0 9/21	38	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 6	4 0	15 1	5 4	8 2	11 6	8 6	Sunfl ower
297	KA/BEN/AREN/0 9/06	26	Fem ale	Married	UG	Househol d	N O	Moderate	7 1	1 0	17 5	5 4	9 2	10 0	6 9	Sunfl ower
298	KA/BEN/AREN/0 9/07	32	Fem ale	Married	Secondary	Househol d	N O	Moderate	7 9	1 0	16 1	5 9	9 2	11 6	8 0	Sunfl ower
299	KA/BEN/AREN/0 9/10	42	Mal e	Married	UG	Agricultur e	N O	Vigorous	8 0	2 0	15 6	6 0	9 3	14 0	9 4	Sunfl ower
300	KA/BEN/AREN/0 9/13	40	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	7 5	3 0	14 4	4 2	8 5	11 2	6 2	Sunfl ower
301	KA/BEN/AREN/0 9/15	36	Mal e	Married	High School	Agricultur e	N O	Vigorous	8 5	2 0	16 0	4 4	7 9	11 0	7 6	Sunfl ower
302	KA/BEN/AREN/0 9/16	34	Fem ale	Married	Primary	Agricultur e	N O	Vigorous	7 6		14 7	4 0	7 9	13 0	8 7	Sunfl ower
303	KA/BEN/AREN/0 9/17	25	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 9		15 0	4 4	7 9	11 2	7 5	Sunfl ower
304	KA/BEN/AREN/0 9/19	60	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 2	3 0	14 7	4 1	9 3		7 99	Palm

305	KA/BEN/AREN/0 9/22	40	Fem ale	Married	High School	Clerical	N O	Moderate	7 9	3 0	15 2	5 9	9 3	11 8	8 1	Sunfl ower
306	KA/BEN/AREN/0 9/23	35	Mal e	Married	Primary	Other	N O	Moderate	8 8	3 0	15 2	3 9	8 6	11 9	6 5	Grou ndnut
307	KA/BEN/AREN/1 0/03	48	Fem ale	Married	No Formal Education	Unemploy ed	N O	NO Exercise	1 6	8 0	16 1	0 0	1 6	15 7	0 3	Soya bean
308	KA/BEN/AREN/1 0/05	60	Mal e	Married	No Formal Education	Agricultur e	N O	Moderate	1 6	7 0	10 5	7 5	7 5	15 2	8 9	Sunfl ower
309	KA/BEN/AREN/1 0/06	50	Mal e	Unmarri ed	Primary	Unemploy ed	Y es	NO Exercise	7 4	6 0	14 1	5 7	7 4	13 5	9 1	Sunfl ower
310	KA/BEN/AREN/1 0/08	45	Fem ale	Married	High School	Unemploy ed	N O	Moderate	1 0	6 0	76	1 0	1 1	14 7	0 6	Sunfl ower
311	KA/BEN/AREN/1 0/11	58	Mal e	Married	Primary	Agricultur e	N O	Vigorous	1 0	6 7	17 6	7 5	7 7	13 7	9 7	Sunfl ower
312	KA/BEN/AREN/1 0/01	65	Mal e	Married	Primary	Unskilled	Y es	Moderate	9 0	5 0	13 8	5 5	9 0	14 1	9 8	Sunfl ower
313	KA/BEN/AREN/1 0/02	52	Fem ale	Married	Primary	Unemploy ed	N O	Moderate	8 5	5 0	15 8	5 7	8 5	12 2	8 9	Sunfl ower
314	KA/BEN/AREN/1 0/04	58	Mal e	Married	Primary	Clerical	N O	Vigorous	9 6	5 0	17 5	6 0	9 6	94	7 3	Soya bean
315	KA/BEN/AREN/1 0/07	50	Mal e	Married	High School	Agricultur e	N O	Vigorous	9 7	5 0	16 5	6 7	9 7	14 4	9 8	Sunfl ower
316	KA/BEN/AREN/1 0/10	48	Fem ale	Married	Primary	Unemploy ed	N O	Moderate	8 3	5 0	17 0	5 5	8 3	10 7	7 1	Sunfl ower
317	KA/BEN/AREN/1 0/16	33	Mal e	Married	UG	Other	N O	Mild	9 7	5 0	18 7	9 8	9 7	15 1	9 5	Sunfl ower
318	KA/BEN/AREN/1 0/12	24	Fem ale	Married	Primary	Service	N O	Moderate	8 5	3 0	15 3	6 0	8 0	13 2	9 2	Sunfl ower
319	KA/BEN/AREN/1 0/13	60	Mal e	Married	No Formal Education	Agricultur e	N O	Vigorous	7 4	3 0	15 7	3 7	7 4	10 6	7 2	Palm
320	KA/BEN/AREN/1 0/14	30	Mal e	Married	Secondry	Service	N O	Moderate	9 3	3 0	16 4	7 0	9 3	11 0	6 9	Sunfl ower
321	KA/BEN/AREN/1 0/15	55	Mal e	Married	No Formal Education	Agricultur e	N O	Vigorous	8 6	3 0	16 3	5 5	8 6	18 1	0 7	Palm
322	KA/BEN/AREN/1 0/09	27	Fem ale	Married	Technical Education	Househol d	N O	Moderate	8 5	3 0	16 8	6 0	8 5	11 5	6 7	Sunfl ower
323	KA/BEN/AREN/1 2/03	56	Mal e	Married	Primary	Sale	N O	Vigorous	1 0	6 0	17 0	7 5	0 9	15 2	8 5	Sunfl ower

324	KA/BEN/AREN/1 2/05	45	Fem ale	Married	No Formal Education	Househol d	Y es	Moderate	9 5	7 0	15 7	7 4	1 4	17 9	0 4	Sunfl ower
325	KA/BEN/AREN/1 2/07	45	Fem ale	Married	High School	Househol d	N O	Moderate	9 9	6 0	15 7	7 4	1 5	14 4	0 0	Sunfl ower
326	KA/BEN/AREN/1 2/16	42	Mal e	Married	No Formal Education	Agricultur e	N O	Vigorous	9 8	4 0	16 4	7 0	9 4	14 1	9 3	Sunfl ower
327	KA/BEN/AREN/1 2/04	48	Fem ale	Married	High School	Househol d	N O	Vigorous	9 1	5 0	16 2	7 4	0 6	17 5	6 5	Sunfl ower
328	KA/BEN/AREN/1 2/15	25	Fem ale	Married	High School	Househol d	N O	Moderate	9 0	4 0	15 2	5 0	9 7		7 3	Sunfl ower
329	KA/BEN/AREN/1 2/17	22	Mal e	Married	UG	Other	N O	NO Exercise	8 7	5 0	15 6	6 3	9 9	12 1	8 4	Sunfl ower
330	KA/BEN/AREN/1 2/23	23	Fem ale	Married	UG	Profession al	N O	Mild	8 0	4 0	16 8	5 7	8 7	12 3	8 7	Sunfl ower
331	KA/BEN/AREN/1 2/10	50	Fem ale	Married	Primary	Househol d	N O	Moderate	7 8	4 0	15 5	5 5	9 6	12 8	9 5	Sunfl ower
332	KA/BEN/AREN/1 2/01	54	Mal e	Married	UG	Agricultur e	N O	Vigorous	7 5	3 0	16 7	6 0	6 4	11 9	7 0	Other
333	KA/BEN/AREN/1 2/02	42	Fem ale	Married	High School	Househol d	N O	Vigorous	7 4	2 0	15 5	4 9	9 3	10 7	5 1	Other
334	KA/BEN/AREN/1 2/06	27	Fem ale	Married	High School	Househol d	N O	Vigorous	7 5		16 3	5 9	9 1	10 5	6 8	Sunfl ower
335	KA/BEN/AREN/1 2/08	33	Mal e	Married	Technical Education	Profession al	N O	Mild	8 0	2 0	17 2	6 3	9 2	11 8	8 0	Sunfl ower
336	KA/BEN/AREN/1 2/09	24	Fem ale	Married	Secondry	Househol d	N O	Moderate	6 9	1 0	15 0	5 2	7 1	11 4	0 0	Sunfl ower
337	KA/BEN/AREN/1 2/11	22	Fem ale	Married	High School	Househol d	N O	Moderate	8 2	3 0	15 0	5 0	8 8	10 5	6 9	Sunfl ower
338	KA/BEN/AREN/1 2/12	31	Fem ale	Married	High School	Househol d	N O	Moderate	7 5	1 0	15 8	5 4	9 6	12 6	7 1	Sunfl ower
339	KA/BEN/AREN/1 2/13	28	Fem ale	Married	High School	Househol d	N O	Moderate	7 2	1 0	16 2	5 3	9 3	11 6	7 6	Sunfl ower
340	KA/BEN/AREN/1 2/14	35	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	7 6	1 0	14 8	4 5	9 0	13 3	7 6	Coco nut
341	KA/BEN/AREN/1 2/18	34	Fem ale	Married	Primary	Househol d	N O	Moderate	8 0	1 0	15 0	5 6	0 3	13 3	8 0	Sunfl ower
342	KA/BEN/AREN/1 2/19	32	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	9 0	3 0	16 0	5 9	9 6	15 4	8 6	Sunfl ower
343	KA/BEN/AREN/1 2/20	27	Mal e	Married	Technical Education	Clerical	N O	Moderate	9 4	3 0	17 2	7 1	9 4	11 8	8 0	Sunfl ower

344	KA/BEN/AREN/1 2/21	31	Fem ale	Married	High School	Househol d	N O	Moderate	7 9	1 0	15 7	6 6	9 4	12 6	9 5	Sunfl ower
345	KA/BEN/AREN/1 2/22	27	Mal e	Unmarri ed	High School	Agricultur e	N O	Mild	8 7	2 0	17 0	6 7	9 0	15 9	1 1	Sunfl ower
346	KA/BEN/AREN/1 2/24	27	Mal e	Married	UG	Sale	N O	Mild	8 9	3 0	17 5	8 0	0 1	13 5	0 0	Sunfl ower
347	KA/BEN/AREN/1 3/19	56	Mal e	Married	Primary	Agricultur e	N O	Moderate	9 5	6 0	17 4	7 2	0 2	12 3	7 8	Grou ndnut
348	KA/BEN/AREN/1 3/20	47	Fem ale	Married	Secndry	Househol d	N O	Moderate	9 8	7 0	16 0	8 1	0 7	12 6	9 6	Sunfl ower
349	KA/BEN/AREN/1 3/14	44	Mal e	Married	High School	Sale	N O	Moderate	9 9	5 0	16 8	6 7	0 1	13 6	9 0	Grou ndnut
350	KA/BEN/AREN/1 3/17	45	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	7 7	4 0	16 7	4 2	8 2	12 8	0 1	Grou ndnut
351	KA/BEN/AREN/1 3/18	60	Fem ale	Married	No Formal Education	Agricultur e	N O	Vigorous	8 3	5 0	13 8	4 6	9 5	12 9	1 2	Grou ndnut
352	KA/BEN/AREN/1 3/23	45	Fem ale	Married	No Formal Education	Unskilled	N O	Moderate	8 8	5 0	15 4	6 0	9 7	11 0	8 2	Sunfl ower
353	KA/BEN/AREN/1 3/01	63	Fem ale	Married	No Formal Education	Househol d	N O	Mild	6 9	5 0	16 1	4 6	8 8	13 9	8 0	Grou ndnut
354	KA/BEN/AREN/1 3/02	46	Fem ale	Married	No Formal Education	Househol d	N O	Moderate	9 4	5 0	15 6	7 4	0 2	15 1	9 3	Grou ndnut
355	KA/BEN/AREN/1 3/03	20	Fem ale	Married	Secndry	Househol d	N O	Moderate	8 2	3 0	15 8	5 9	9 4	11 7	7 7	Grou ndnut
356	KA/BEN/AREN/1 3/04	32	Fem ale	Married	High School	Househol d	N O	Moderate	8 5	3 0	15 8	5 7	9 9	10 7	7 4	Grou ndnut
357	KA/BEN/AREN/1 3/05	28	Fem ale	Married	Primary	Househol d	N O	Moderate	9 0	4 0	15 5	5 1	9 4	11 3	7 9	Grou ndnut
358	KA/BEN/AREN/1 3/06	45	Fem ale	Married	No Formal Education	Househol d	N O	Mild	8 1	6 0	16 6	5 0	9 0	12 6	8 5	Grou ndnut
359	KA/BEN/AREN/1 3/07	23	Fem ale	Married	High School	Househol d	N O	Moderate	1 6	4 0	16 5	9 4	2 2	10 9	7 7	Grou ndnut
360	KA/BEN/AREN/1 3/08	52	Mal e	Married	No Formal Education	Unskilled	N O	Vigorous	7 9	3 0	16 4	4 2	8 0	11 0	7 4	Grou ndnut

361	KA/BEN/AREN/1 3/09	57	Male	Married	Secondary	Agriculture	NO	Vigorous	89	30	160	55	92	123	92	Groupnut
362	KA/BEN/AREN/1 3/10	27	Male	Unmarried	Technical Education	Agriculture	NO	Vigorous	90	30	178	72	01	131	91	Groupnut
363	KA/BEN/AREN/1 3/11	49	Female	Married	Secondary	Household	NO	Moderate	78	30	158	52	95	98	73	Sunflower
364	KA/BEN/AREN/1 3/12	45	Female	Married	No Formal Education	Agriculture	NO	Vigorous	77	20	154	47	83	103	66	Groupnut
365	KA/BEN/AREN/1 3/13	55	Male	Married	No Formal Education	Unskilled	NO	Vigorous	98	50	166	58	00	126	93	Groupnut
366	KA/BEN/AREN/1 3/15	40	Female	Married	High School	Agriculture	NO	Vigorous	79	20	160	56	92	130	92	Groupnut
367	KA/BEN/AREN/1 3/16	28	Male	Unmarried	Secondary	Agriculture	NO	Vigorous	88	00	171	61	02	130	96	Groupnut
368	KA/BEN/AREN/1 3/22	58	Male	Married	Primary	Sale	NO	Vigorous	88	30	163	53	88	129	93	Groupnut
369	KA/BEN/AREN/1 3/24	28	Male	Married	Secondary	Skilled	NO	Moderate	97	30	170	70	03	164	77	Groupnut
370	KA/BEN/AREN/0 2/01	33	Male	Unmarried	Primary School	Skilled worker	NO	Moderate exercise	93	30	178	83	03	135	82	Sunflower
371	KA/BEN/AREN/0 2/02	57	Male	Married	High school	Agriculture/Self employed	NO	Vigorous Exercise	69	30	160	53	75	141	02	Sunflower
372	KA/BEN/AREN/0 2/03	45	Female	Married	Primary School	Agriculture/Self employed	NO	Mild Exercise	91	70	156	74	11	169	06	Sunflower
373	KA/BEN/AREN/0 2/04	55	Female	Married	No formal schooling	Agriculture/Self employed	NO	Mild Exercise	72	50	158	50	96	115	79	Sunflower
374	KA/BEN/AREN/0 2/05	56	Female	Married	No formal schooling	Agriculture/Self employed	NO	Mild Exercise	72	50	155	52	04	134	91	Sunflower
375	KA/BEN/AREN/0 2/06	35	Female	Married	High school	Agriculture/Self employed	NO	Moderate exercise	76	30	158	61	00	112	85	Sunflower
376	KA/BEN/AREN/0 2/07	40	Female	Married	No formal schooling	Household work	NO	Mild Exercise	91	70	153	62	05	119	80	Sunflower
377	KA/BEN/AREN/0 2/08	48	Female	Married	No formal schooling	Household work	NO	Mild Exercise	66	40	156	46	82	125	79	Sunflower

378	KA/BEN/AREN/0 2/09	45	Male	Married	High school	Skilled worker	N O	Mild Exercise	9 1	6 0	17 0	6 0	1 1	10 0	7 0	Sunflower
379	KA/BEN/AREN/0 2/10	23	Male	Unmarried	P. G. Degree or above	Skilled worker	N O	Moderate exercise	7 1	1 0	18 5	6 2	8 8	10 7	7 1	Sunflower
380	KA/BEN/AREN/0 2/11	19	Female	Married	High school	Household work	N O	Mild Exercise	6 5	2 0	15 2	4 3	9 1	10 4	6 8	Sunflower
381	KA/BEN/AREN/0 2/12	23	Female	Married	High school	Household work	N O	Mild Exercise	6 3	2 0	16 0	4 5	8 0	11 4	7 3	Sunflower
382	KA/BEN/AREN/0 2/13	29	Male	Married	High school	Professional/Executive/Manager/Business	N O	Moderate exercise	8 5	1 0	16 2	4 8	1 2	12 0	9 0	Sunflower
383	KA/BEN/AREN/0 2/14	35	Male	Married	Secondary School	Agriculture/Self employed	N O	Mild Exercise	9 0	6 0	16 5	8 6	0 0	13 5	9 5	Sunflower
384	KA/BEN/AREN/0 2/15	28	Female	Married	Primary School	Household work	N O	Moderate exercise	7 9	1 0	15 9	5 3	9 8	14 0	9 0	Sunflower
385	KA/BEN/AREN/0 2/16	28	Male	Married	Secondary School	Professional/Executive/Manager/Business	N O	Mild Exercise	8 6	2 0	17 4	6 4	9 3	96	5 3	Sunflower
386	KA/BEN/AREN/0 2/17	63	Female	Married	No formal schooling	Household work	N O	Mild Exercise	6 5	5 0	15 5	9 1	7 3	14 6	8 8	Sunflower
387	KA/BEN/AREN/0 2/18	28	Male	Married	Secondary School	Agriculture/Self employed	N O	Mild Exercise	9 7	2 0	18 1	8 5	0 3	12 8	8 7	Sunflower
388	KA/BEN/AREN/0 2/19	32	Male	Married	P. G. Degree or above	Skilled worker	N O	Mild Exercise	7 3	2 0	17 1	5 3	8 5	14 7	0 6	Sunflower
389	KA/BEN/AREN/0 2/20	38	Male	Married	Secondary School	Skilled worker	N O	Mild Exercise	1 1	7 0	17 0	8 9	0 6	15 7	1 5	Sunflower
390	KA/BEN/AREN/0 2/21	24	Male	Married	Secondary School	Skilled worker	N O	Mild Exercise	9 4	4 0	17 8	8 3	0 4	16 4	0 0	Sunflower
391	KA/BEN/AREN/0 2/22	23	Male	Unmarried	High school	Skilled worker	N O	Mild Exercise	9 0	2 0	17 3	7 2	1 0	NA	N A	Sunflower
392	KA/BEN/AREN/0 2/23	20	Female	Married	Undergraduate degree	Household work	N O	Mild Exercise	7 8	2 0	15 8	4 0	8 2	12 8	0 0	Sunflower

393	KA/BEN/AREN/0 2/24	65	Fem ale	Married	Primary School	Househol d work	N O	Mild Exercise	7 8	5 0	16 0	6 0	9 0	13 0	8 8	Sunfl ower	
394	KA/BEN/AREN/0 2/25	35	Mal e	Married	Primary School	Shop owner	N O	Moderate exercise	8 5	3 0	16 4	7 5	0 0	13 0	9 5	Sunfl ower	
395	KA/BEN/AREN/0 2/26	30	Mal e	Married	Undergraduate degree	Profession al/ Executive/ Manager/ Business	N O	Mild Exercise	1 0	5 0	16 5	1 0	1 2	NA	NA	N A	Sunfl ower
396	KA/BEN/AREN/0 2/27	21	Fem ale	Unmarri ed	Undergraduate degree	Househol d work	N O	Mild Exercise	7 0	2 0	16 0	5 0	8 5	NA	NA	N A	Sunfl ower
397	KA/BEN/AREN/0 2/28	30	Mal e	Married	Undergraduate degree	Profession al/ Executive/ Manager/ Business	N O	Moderate exercise	7 5	1 0	16 4	7 0	9 0	NA	NA	N A	Sunfl ower
398	KA/BEN/AREN/0 1/01	28	Mal e	Married	Undergraduate degree	Medium Scale business	N O	Mild Exercise	9 6	2 0	18 8	9 4	4 3	13 9	8 8	Sunfl ower	
399	KA/BEN/AREN/0 1/02	20	Fem ale	Married	High school	Househol d work	N O	Mild Exercise	8 3	2 0	16 3	7 1	3 8	12 0	8 7	Sunfl ower	
400	KA/BEN/AREN/0 1/03	29	Fem ale	Married	Undergraduate degree	Househol d work	N O	Mild Exercise	8 3	3 0	16 5	6 6	4 0	11 4	7 3	Sunfl ower	
401	KA/BEN/AREN/0 1/04	32	Fem ale	Married	No formal schooling	Unskilled work	N O	Mild Exercise	5 8	2 0	17 2	6 1	9 7	12 0	8 4	Sunfl ower	
402	KA/BEN/AREN/0 1/05	28	Mal e	Married	No formal schooling	Agricultur e/Self employed	N O	Vigorous Exercise	8 1	2 0	17 2	6 1	9 7	12 0	8 4	Sunfl ower	
403	KA/BEN/AREN/0 1/06	28	Mal e	Unmarri ed	Undergraduate degree	Skilled worker	N O	Mild Exercise	1 0	5 0	17 5	9 2	0 9	14 8	8 5	Sunfl ower	
404	KA/BEN/AREN/0 1/07	37	Fem ale	Married	Primary School	Househol d work	N O	Mild Exercise	8 4	6 0	15 3	6 5	0 6	12 8	8 4	Sunfl ower	
405	KA/BEN/AREN/0 1/08	45	Fem ale	Married	No formal schooling	Unskilled work	N O	Moderate exercise	7 0	3 0	15 7	4 8	8 4	10 1	7 0	Sunfl ower	
406	KA/BEN/AREN/0 1/09	36	Mal e	Married	High school	Agricultur e/Self employed	N O	Vigorous Exercise	7 9	2 0	16 7	5 7	8 7	13 4	8 8	Sunfl ower	
407	KA/BEN/AREN/0 1/10	26	Fem ale	Married	High school	Househol d work	N O	Mild Exercise	1 0	6 0	16 2	9 6	2 5	12 1	9 2	Sunfl ower	
408	KA/BEN/AREN/0 1/11	20	Fem ale	Unmarri ed	High school	Househol d work	N O	Mild Exercise	6 2	2 0	16 8	5 4	7 9	11 2	7 0	Grou ndnut	

409	KA/BEN/AREN/0 1/12	36	Fem ale	Married	High school	Househol d work	N O	Mild Exercise	8 0	4 0	16 3	6 1	9 7	12 0	8 5	Sunfl ower
410	KA/BEN/AREN/0 1/13	41	Mal e	Married	Undergraduate degree	Skilled worker	N O	Moderate exercise	1 0	6 8	18 4	7 9	0 0	15 5	0 5	Sunfl ower
411	KA/BEN/AREN/0 1/29	36	Mal e	Married	Secondary school	Sale	N O	Nil	8 0	5 0	16 8	7 0	9 0	NA	NA	NA
412	KA/BEN/AREN/0 1/30	26	Fem ale	Married	Secondary school	Nil	N O	Nil	7 0	5 0	16 1	5 0	8 0	NA	NA	NA
413	KA/BEN/AREN/0 1/31	58	Mal e	Married	Secondary school	Agricultur e/self employed	N O	Nil	8 0	5 0	16 6	9 0	9 5	NA	NA	NA
414	KA/BEN/AREN/0 1/32	48	Fem ale	Married	Secondary school	Househol d and domestic work	N O	Nil	7 0	5 0	15 9	5 8	8 5	NA	NA	NA
415	KA/BEN/AREN/0 1/33	26	Mal e	Married	Pg. degree or above	Agricultur e/self employed	N O	Nil	7 5	5 0	16 8	6 8	8 5	NA	NA	NA
416	KA/BEN/AREN/0 1/34	24	Fem ale	Married	Undergradutede rgee	Househol d and domestic work	N O	Nil	7 9	5 0	16 2	6 0	9 0	NA	NA	NA
417	KA/BEN/AREN/0 1/35	27	Fem ale	Married	Technical education	Profession al/executi ve/manag er/big business	N O	Nil	8 5	5 0	16 4	6 5	9 0	NA	NA	NA
418	KA/BEN/AREN/0 1/36	27	Fem ale	Married	Undergradutede rgee	Profession al/executi ve/manag er/big business	N O	Nil	7 5	5 0	16 5	6 5	8 5	NA	NA	NA
419	KA/BEN/AREN/0 1/37	40	Mal e	Married	Secondary school	Sale	N O	Nil	8 5	5 0	16 7	8 5	9 0	NA	NA	NA
420	KA/BEN/AREN/0 1/38	24	Fem ale	Married	Secondary school	Househol d and domestic work	N O	Nil	7 5	5 0	15 8	6 0	8 5	NA	NA	NA
421	KA/BEN/AREN/0 1/39	58	Fem ale	Married	No formal schooling	Nil	N O	Nil	7 1	5 0	15 9	4 8	8 0	NA	NA	NA
422	KA/BEN/AREN/0 1/40	70	Fem ale	Married	No formal schooling	Househol d and domestic work	N O	Nil	7 5	5 0	16 5	5 5	8 5	NA	NA	NA

423	KA/BEN/AREN/0 1/41	70	Male	Married	Nil	Nil	NO	Nil	61	50	186	77	73	NA	NA	NA
424	KA/BEN/AREN/0 1/42	55	Female	Married	No formal schooling	Household and domestic work	NO	Nil	70	50	158	50	81	NA	NA	NA
425	KA/BEN/AREN/0 1/43	28	Male	Married	Undergraduate degree	Professional/executive/manager/big business	NO	Nil	80	50	170	78	95	NA	NA	NA
426	KA/BEN/AREN/0 1/44	33	Male	Married	Undergraduate degree	Agriculture/self employed	NO	Nil	81	50	164	65	90	NA	NA	NA
427	KA/BEN/AREN/0 1/45	31	Female	Married	Undergraduate degree	Professional/executive/manager/big business	NO	Nil	80	50	164	60	85	NA	NA	NA
428	KA/BEN/AREN/0 1/46	33	Male	Married	Undergraduate degree	Professional/executive/manager/big business	NO	Nil	70	50	168	75	85	NA	NA	NA
429	KA/BEN/AREN/0 1/47	28	Female	Married	Undergraduate degree	Professional/executive/manager/big business	NO	Nil	70	50	160	50	75	NA	NA	NA
430	KA/BEN/AREN/0 1/48	46	Female	Married	Secondary school	Agriculture/self employed	NO	Nil	85	50	175	85	90	NA	NA	NA
431	KA/BEN/AREN/0 1/49	23	Male	Unmarried	Technical education	Do not work/unemployed	NO	Nil	71	50	164	65	85	NA	NA	NA
432	KA/BEN/AREN/0 1/50	26	Female	Married	Secondary school	Household and domestic work	NO	Nil	71	50	162	55	85	NA	NA	NA
433	KA/BEN/AREN/0 1/16	29	Female	Married	Undergraduate degree	Household and domestic work	NO	Mild exercise	65	20	144	44	80	103	63	Sunflower

434	KA/BEN/AREN/1 5/15	24	Female	Unmarried	High School And Higher	Household and domestic work	N O	Moderate exercise	5 7	2 0	14 7	3 0	8 2	10 6	7 7	Sunflower
435	KA/BEN/AREN/0 1/16	22	Male	Unmarried	Nil	Agriculture/ Self employed	N O	Vigorous exercise	7 3	0 0	16 1	5 0	9 2	11 0	8 5	Sunflower
436	KA/BEN/AREN/0 1/17	62	Male	Married	No formal schooling	Sale	N O	Moderate exercise	6 8	4 0	17 0	4 5	8 1	12 2	8 5	Sunflower
437	KA/BEN/AREN/0 1/18	35	Male	Married	High School And Higher	Clerical/ medium business	N O	Vigorous exercise	9 0	2 0	17 0	8 5	0 0	12 8	8 5	Sunflower
438	KA/BEN/AREN/0 1/19	62	Female	Married	No formal schooling	Clerical/ medium business	N O	Vigorous exercise	7 6	3 0	16 0	5 2	8 0	Nil	N 1	Sunflower
439	KA/BEN/AREN/0 1/20	24	Female	Married	Undergraduate degree	Household and domestic work	N O	Mild exercise	7 0	2 0	16 1	6 1	0 2	11 9	7 6	Sunflower
440	KA/BEN/AREN/0 1/21	60	Male	Married	High School And Higher	Agriculture/ Self employed	N O	Vigorous exercise	7 0	3 0	16 2	8 6	8 1	13 2	8 4	Sunflower