HEALTH BEHAVIOR MONITOR AMONG NIGERIAN ADULT POPULATION

A collaborative work of Nigerian Heart Foundation and Federal Ministry of Health and Social Services, Abuja supported by World Health Organization, Geneva

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PREFACE

The Nigerian Heart Foundations' work in Public Health focuses on improving the health and socio-economic well being of the Nigerian population.

This publication is a collaborative work between Nigerian Heart foundation and Federal Ministry of Health with financial support from World Health Organization, Geneva. The research was conducted at the Research unit of Nigerian Heart Foundation. This is a premier publication on the health behavior of Nigerian adult population. The Nigerian Heart Foundation aims to continue providing relevant accessible baseline data on the health behavior and health of Nigerians and to contribute to policy formulation for health interventions, programmes and services.

The questionnaire contained questions on demographic information, tobacco use/smoking, alcohol consumption, nutrition, physical activity, women's health, men's health, family history, personal history, oral health, children's health, traffic safety, violence and attitude to killing. The core questions in the questionnaire were adapted from the Finbalt Health Monitor Survey and W.H.O. stepwise approach to surveillance. Questions on subjects peculiar to the Nigerian situation were also included. Tables on various health behaviors form a substantial part of this report.

The Nigerian Health Behavior Monitor Survey was established to provide national information about the health of Nigerians and determinants of health. It is to be done in zones and this result (Western zone) is the first of the six zones to be undertaken. The survey followed a thorough procedure from the start to the end to ensure timely collection of relevant data and health information, towards promotion of policy development and strategic planning. Interviews were conducted in English language and local languages.

This report is expected to facilitate discussion on the topic with those who use health risk data for analysis and policymaking.

I therefore encourage readers of this report to provide comments about the issues and also recommend stakeholders to work together towards a collective approach to collection of data and its appropriate use.

Professor. O. O. Akinkugbe CON

President, Nigerian Heart Foundation November 2003.

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Executive Summary

The proportion of smokers is higher in the urban area than in the rural area with proportions of 9.9 % and 8.8 % respectively. The female population hardly smokes tobacco products in both urban and rural areas.

Most respondents had the awareness of the dangers of smoking with more than half in the urban area, aware of the Federal government warning on smoking and 38.5 % aware in the rural area. Smokeless tobacco products were unpopular in both urban and rural areas.

Commencement of daily smoking was usually between the ages of 10-29 years. Campaigns directed at this group of persons may lead to a reduction in the prevalence of smoking.

Most persons that have smoked daily in urban areas have smoked for 26 years or more, while in the rural area, these persons have smoked for 1-3 years.

Alcohol is taken more frequently in the urban than in the rural area with percentages of 35.4 % and 27.1 % respectively. Males drink more alcohol than females.

The average amount of alcoholic drinks taken per day by drinkers of alcoholic beverages was in the range of between 1-4 drinks in both urban and rural areas.

Palm oil is the cooking oil/fat mostly used for cooking in both urban and rural areas with a proportion of 60.5 % and 89.6 % respectively. Cholesterol free vegetable oil was quite unpopular in the rural area. In the urban area, there was low usage of 21.3 %.

The practice of always adding salt to already prepared food was low in both urban and rural area. The majority never added salt to already prepared food with proportions of 76.8 % and 61.7 % respectively.

Women in the urban and rural population combined, who have ever used a condom were 17.4% while men who have ever used a condom were 44.2%.

Within women, 16.7% have ever used a condom in the rural area while 18.3% in the urban area. Amongst men 47.5% have eve used condoms in urban area and 40.9% in the rural area.

Within males, 17.2% always use condoms in urban area while 17.2% occasionally do. In the rural area, 21.1% always use a condom.

Middle-aged persons have a higher percentage of condom users than younger and elderly persons. It would therefore be appropriate if health education measures on the usefulness of condoms were targeted at females and also teenagers, young adults and the elderly.

A low percentage of persons in the urban and rural area use seat belts either while driving or as passengers in front seat. Majority of persons never use seat belts.

The prevalence of hypertension in both urban and rural areas combined is 34.8 %. The prevalence in the urban area is greater than in the rural area with proportions of 44.3 % and 25.0 % respectively. It was found to be higher in females than in males living in the urban area, and more in males than females in the rural area. There was a higher prevalence with increasing age.

INTRODUCTION

This health monitor project is carried out in Nigeria. It is based on the experiences of the Finbalt Health Monitor system in conducting study on the Health Behavior of the Finnish Adult Population from 1978 – 1998. Health Behavior surveys have been carried out in Estonia, Lithuania, Latvia, Pitkaranta, Republic of Karelia, Russia and Hungary using a common protocol.

The aim of the National study is to collect information on health behavior among 6,000 adult Nigerian populations. The Specific aims are to build national research capacity for monitoring of health behavior, to carry out annual analysis on health behavior and prepare scientific reports dealing with topics of major public health interest and to disseminate information and research expertise between Nigeria and Finland in order to successfully implement monitoring and assist national health policies and health promotion efforts.

This report presents the results from the survey carried out in 2003 in Lagos state.

MATERIALS AND METHODS

A random sample of 1000 inhabitants of Lagos (Urban and Rural) between the ages of 15 years and above was taken from both sexes.

For the National survey, a three stage stratified cluster sampling technique was used. The first sampling consisted of the list of states of the Federation including the Federal Capital Territory. For the second stage the list of the Local Government Areas (LGA) was chosen as a convenient sampling frame. In the third stage, the communities in the selected LGAs were split into urban and rural areas and were followed by a census of the housing units. From this list a sample of enumeration areas were selected with probability proportionate to size.

An initial pilot survey was carried out in Lagos state in both rural and urban communities in March, before the commencement of the actual study.

In May 2003, a team of 20 trained interviewers commenced data collection by personal (face-to-face) interviews. They were divided into 2 groups for the Urban and Rural communities. Data collection continued for 2 weeks initially with an extra 1-day to complete a rural community not completed within the 2 weeks, due to distance.

The core questions in the questionnaire were similar to the Finbalt Health Monitor survey questions combined with W.H.O step-wise approach to surveillance and included questions on subjects peculiar to the Nigerian situation.

The questionnaire were responded to by 1018 people (543 females and 475 males) and contained 204 questions on demographic information, Tobacco use/smoking, alcohol consumption, Nutrition, physical activity, Women's health, Men's health, Family history, personal history, Oral health, Children's health, Traffic safety, Violence and attitude to Killing.

RESULTS

Total number of respondents

In the health behavior monitor project, there were 517 respondents from the urban area and 501 respondents from the rural area.

Sector by Sex

			Sex		
			Male	Female	Total
Sector	Urban	Count	238	279	517
		% within Sector	46.0%	54.0%	100.0%
		% within Sex	50.1%	51.4%	50.8%
		% of Total	23.4%	27.4%	50.8%
	Rural	Count	237	264	501
		% within Sector	47.3%	52.7%	100.0%
		% within Sex	49.9%	48.6%	49.2%
		% of Total	23.3%	25.9%	49.2%
Total		Count	475	543	1018
		% within Sector	46.7%	53.3%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.7%	53.3%	100.0%

DEMOGRAPHICS

Area lived most part of lives (Urban or Rural)

573 of the **total respondents** had lived in the urban area (46.9% males and 53.1% females) most part of their lives while 445 had lived in rural area (46.3% males and 53.7% females) most part of their lives. Males and females between the ages of 25 – 34 had the highest proportion of those that had lived the most part of their lives in the urban area with proportions of 11.9% and 14.3 % respectively (Table 2a). This is as compared with other age groups.

Area lived most part of life by sex

			Sex		
			Male	Female	Total
Lived most part of life in	Urban	Count	269	304	573
		% within Area lived most part of	46.9%	53.1%	100.0%
		% within Sex	56.6%	56.0%	56.3%
		% of Total	26.4%	29.9%	56.3%
	Rural	Count	206	239	445
		% within Area lived most part of life	46.3%	53.7%	100.0%
		% within Sex	43.4%	44.0%	43.7%
		% of	20.2%	23.5%	43.7%
Total		Count	475	543	1018
		% within Area lived most part of life	46.7%	53.3%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.7%	53.3%	100.0%

Area lived in the last 5 years (Urban or Rural)

Of the total respondents, 53% had lived in the urban area in the last 5 years with males and females between the ages 25 – 34 having the highest proportions of 13.8% (females) and 11.5% (males). (Table 3a)

Of the total respondents 46 % had lived in the rural area in the last 5 years with males and females between the ages 15-24 having the highest proportions of 16.1 % (males) and 18.7 % (females). (Table 3a)

(1%) of the total respondents had lived in both rural and urban areas in the last 5 years (Table 3a)

Area lived in last 5 years * Sex Crosstabulation

			Sex		
			Male	Female	Total
Area lived in last 5 years	Urban	Count	248	290	538
		% within Area lived in last 5 years	46.1%	53.9%	100.0%
		% within Sex	52.2%	53.4%	52.8%
		% of Total	24.4%	28.5%	52.8%
	Rural	Count	219	247	466
		% within Area lived in last 5 years	47.0%	53.0%	100.0%
		% within Sex	46.1%	45.5%	45.8%
		% of Total	21.5%	24.3%	45.8%
	Mixed	Count	8	6	14
		% within Area lived in last 5 years	57.1%	42.9%	100.0%
		% within Sex	1.7%	1.1%	1.4%
		% of Total	.8%	.6%	1.4%
Total		Count	475	543	1018
		% within Area lived in last 5 years	46.7%	53.3%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.7%	53.3%	100.0%

SMOKING

Health behavior monitor data shows generally that most smokers are males in the rural and urban areas with very few females that smoke. The older age group smoked more than teenagers and younger persons.

Current Tobacco product users and daily tobacco product users

URBAN: In the urban area, prevalence of current tobacco users was 9.9%. 90.2 % of these persons are males and 9.8% are females. Among males, those in the age group between 55-64 years have the highest prevalence of 25% (table 4a) while in females; those between the ages of 45-54 years have the highest prevalence of 7.7 %. (Table 4a) Among those that currently use tobacco products, 94% (table 5a) use tobacco products daily in the urban area with the highest proportion of 23.4% among males in the age group 55-64 years and highest proportion of 6.4% among females in the age group between 45-54 years.

RURAL: In the rural area, 8.8 % of respondents currently use tobacco products of which 97.7 % are males and 2.3 % are females. Among the males, those in age group 45-54 years have the highest prevalence of 27.9 % (Table 4c) while in females; those between the ages of 35-44 years have the highest prevalence of 2.3 % (Table 4c). Among those that currently use tobacco products, 97.7% (table 5c) use tobacco products daily in the rural area (table 5c, pg 26) with the highest proportion of 23% still in the age group 45-54 among males and 45% in the age group between 35-44 among females.

Currently smoke tobacco products by sex - URBAN

			Sex		
			Male	Female	Total
Currently smoke tobacco products	Yes	Count	46	5	51
		% within Currently smoke tobacco products	90.2%	9.8%	100.0%
		% within Sex	19.3%	1.8%	9.9%
		% of Total	8.9%	1.0%	9.9%
	No	Count	192	274	466
		% within Currently smoke tobacco products	41.2%	58.8%	100.0%
		% within Sex	80.7%	98.2%	90.1%
		% of Total	37.1%	53.0%	90.1%
Total		Count	238	279	517
		% within Currently smoke tobacco products	46.0%	54.0%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Currently smoke tobacco products by sex - RURAL

			Sex		
			Male	Female	Total
Currently smoke tobacco products	Yes	Count	43	1	44
		% within Currently smoke tobacco products	97.7%	2.3%	100.0%
		% within Sex	18.1%	.4%	8.8%
		% of Total	8.6%	.2%	8.8%
	No	Count	194	263	457
		% within Currently smoke tobacco products	42.5%	57.5%	100.0%
		% within Sex	81.9%	99.6%	91.2%
		% of Total	38.7%	52.5%	91.2%
Total		Count	237	264	501
		% within Currently smoke tobacco products	47.3%	52.7%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Duration of daily smoking in years

URBAN: Distribution of smokers and duration of daily smoking shows that the highest proportions of 36.2 % (17 out of 47) (table 6a) have been people that have smoked daily for 26 years or more with the lowest proportion of 4.3 % (2 out of 47) (Table 6a) being those that have smoked daily for 20-25 years.

RURAL: Distribution of smokers and duration of daily smoking shows that the highest proportion of 41.9 % (18 out of 43) (Table 6c) are people that have smoked daily for 1-5 years with the lowest proportion of 4.7 % (2 out of 43) (Table 6c) being those that have smoked for 20-25 years.

Age at starting daily use of tobacco products

URBAN: In the urban area, people that started smoking daily between the ages of 10-19 years had the greatest proportion of 44 % (21 out of 47) (Table 7a) while those that started smoking daily between the ages of 40-49 years and 50-59 years had the least proportion of 2.1% each.
RURAL: While in the rural area, people that started smoking daily between the ages of 20-29 years had the greatest proportion of 46.5 % (20 out of 43) (Table 7c) while those that started smoking daily between the ages of 50-59 years had the least proportion of 2.3% each.

In the urban area, 14.1 % (73 out of 517) (Table 9a) of respondents smoked daily in the past while in the rural area, 7.9 % (40 out of 501) (Table 9c) smoked daily in the past.

Reasons for stopping smoking of tobacco products

URBAN: For those that have stopped smoking, the highest proportion of 34.2 % of persons stopped smoking due to personal reasons. Campaigns and adverts accounted for 20.5 % of respondent's reasons for stopping smoking.
RURAL: In the rural area, those that stopped smoking for personal reasons also had the highest proportion of 32.5 %.

Reasons for stopping smoking by sex - URBAN

			SEX		
			Male	Female	Total
Reasons for stopping smoking	personal reasons	Count	20	5	25
		% within Reasons for stopping smoking	80.0%	20.0%	100.0%
		% within SEX	29.9%	83.3%	34.2%
		% of Total	27.4%	6.8%	34.2%
	religious reasons	Count	11		11
		% within Reasons for stopping smoking	100.0%		100.0%
		% within SEX	16.4%		15.1%
		% of Total	15.1%		15.1%
	others	Count	3		3
		% within Reasons for stopping smoking	100.0%		100.0%
		% within SEX	4.5%		4.1%
		% of Total	4.1%		4.1%
	Adverts/campaign	Count	15		15
		% within Reasons for stopping smoking	100.0%		100.0%
		% within SEX	22.4%		20.5%
		% of Total	20.5%		20.5%
	doctors advice	Count	18	1	19
		% within Reasons for stopping smoking	94.7%	5.3%	100.0%
		% within SEX	26.9%	16.7%	26.0%
		% of Total	24.7%	1.4%	26.0%
Total		Count	67	6	73
		% within Reasons for stopping smoking	91.8%	8.2%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	91.8%	8.2%	100.0%

Reasons for stopping smoking by sex - RURAL

			SEX	
			Male	Total
Reasons for stopping smoking	personal reasons	Count	13	13
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	32.5%	32.5%
		% of Total	32.5%	32.5%
	religious reasons	Count	4	4
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	10.0%	10.0%
		% of Total	10.0%	10.0%
	others	Count	1	1
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	2.5%	2.5%
		% of Total	2.5%	2.5%
	Adverts/campaign	Count	11	11
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	27.5%	27.5%
		% of Total	27.5%	27.5%
	doctors advice	Count	11	11
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	27.5%	27.5%
		% of Total	27.5%	27.5%
Total		Count	40	40
		% within Reasons for stopping smoking	100.0%	100.0%
		% within SEX	100.0%	100.0%
		% of Total	100.0%	100.0%

Awareness of Federal Government warning about smoking

URBAN: More than half of respondents knew about Federal Government warning that smokers are liable to die young at about 68.1 % in the urban area. These people were evenly spread across the various ages. (Table 16a)

RURAL: In this area, 38.5 % of respondents in the rural area know about the Federal Government warning with a majority of them in the younger age group. (Table 16c)

Awareness of Federal Government warning on smoking that "Smokers are liable to die young" by sex - URBAN

			SEX		
			Male	Female	Total
Awareness of Federal Government warning on smoking`	Yes	Count	177	175	352
		% within Awareness of Federal Government warning on smoking`	50.3%	49.7%	100.0%
		% within SEX	74.4%	62.7%	68.1%
		% of Total	34.2%	33.8%	68.1%
	No	Count	61	104	165
		% within Awareness of Federal Government warning on smoking`	37.0%	63.0%	100.0%
		% within SEX	25.6%	37.3%	31.9%
		% of Total	11.8%	20.1%	31.9%
Total		Count	238	279	517
		% within Awareness of Federal Government warning on smoking`	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Awareness of Federal Government warning on smoking that "Smokers are liable to die young" by sex - RURAL

			SEX		
			Male	Female	Total
Awareness of Federal Government warning on smoking`	Missing	Count		1	1
		% within Awareness of Federal Government warning on smoking`		100.0%	100.0%
		% within SEX		.4%	.2%
		% of Total		.2%	.2%
	Yes	Count	134	59	193
		% within Awareness of Federal Government warning on smoking`	69.4%	30.6%	100.0%
		% within SEX	56.5%	22.3%	38.5%
		% of Total	26.7%	11.8%	38.5%
	No	Count	103	204	307
		% within Awareness of Federal Government warning on smoking`	33.6%	66.4%	100.0%
		% within SEX	43.5%	77.3%	61.3%
		% of Total	20.6%	40.7%	61.3%
Total		Count	237	264	501
		% within Awareness of Federal Government warning on smoking`	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Awareness that tobacco is harmful to health

URBAN: 65 % of respondents in the urban area admitted to knowing that tobacco was harmful to health (Table 23a). This knowledge was evenly spread across the age groups.
RURAL: 59.2 % of respondents in the rural area admitted to knowing that tobacco was harmful to health. These persons were more of the younger population (Table 23c).

Awareness that smoking is harmful to health by sex - URBAN

			SEX		
			Male	Female	Total
Awareness that smoking is harmful to health	Missing	Count	18	20	38
		% within Awareness that smoking is harmful to health	47.4%	52.6%	100.0%
		% within SEX	7.6%	7.2%	7.4%
		% of Total	3.5%	3.9%	7.4%
	Yes	Count	144	192	336
		% within Awareness that smoking is harmful to health	42.9%	57.1%	100.0%
		% within SEX	60.5%	68.8%	65.0%
		% of Total	27.9%	37.1%	65.0%
	No	Count	76	67	143
		% within Awareness that smoking is harmful to health	53.1%	46.9%	100.0%
		% within SEX	31.9%	24.0%	27.7%
		% of Total	14.7%	13.0%	27.7%
Total		Count	238	279	517
		% within Awareness that smoking is harmful to health	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Awareness that smoking is harmful to health by sex - RURAL

			SEX		
			Male	Female	Total
Awareness that smoking is harmful to health	Missing	Count	9	34	43
		% within Awareness that smoking is harmful to health	20.9%	79.1%	100.0%
		% within SEX	3.8%	12.9%	8.6%
		% of Total	1.8%	6.8%	8.6%
	Yes	Count	156	140	296
		% within Awareness that smoking is harmful to health	52.7%	47.3%	100.0%
		% within SEX	65.8%	53.2%	59.2%
		% of Total	31.2%	28.0%	59.2%
	No	Count	72	89	161
		% within Awareness that smoking is harmful to health	44.7%	55.3%	100.0%
		% within SEX	30.4%	33.8%	32.2%
		% of Total	14.4%	17.8%	32.2%
Total		Count	237	263	500
		% within Awareness that smoking is harmful to health	47.4%	52.6%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.4%	52.6%	100.0%

Use of smokeless tobacco such as snuff (oral and nasal) or tobacco chewing

URBAN: 0.8 % of respondents (Table 24a) currently use smokeless tobacco such as snuff. All current users were 45 years and above. No females agreed to using smokeless tobacco products.

RURAL: 1.6 % of respondents (Table 24c) use smokeless tobacco such as snuff currently. All users were between 35 and 54 years in age. A couple of females here agreed to using smokeless tobacco products.

Currently use smokeless tobacco by sex - URBAN

			SEX		
			Male	Female	Total
Currently use smokeless tobacco	Missing	Count	15	17	32
		% within Currently use smokeless tobacco	46.9%	53.1%	100.0%
		% within SEX	6.3%	6.1%	6.2%
		% of Total	2.9%	3.3%	6.2%
	Yes	Count	4		4
		% within Currently use smokeless tobacco	100.0%		100.0%
		% within SEX	1.7%		.8%
		% of Total	.8%		.8%
	No	Count	219	262	481
		% within Currently use smokeless tobacco	45.5%	54.5%	100.0%
		% within SEX	92.0%	93.9%	93.0%
		% of Total	42.4%	50.7%	93.0%
Total		Count	238	279	517
		% within Currently use smokeless tobacco	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Currently use smokeless tobacco by sex - RURAL

			SEX		
			Male	Female	Total
Currently use smokeless tobacco	Missing	Count	9	22	31
		% within Currently use smokeless tobacco	29.0%	71.0%	100.0%
		% within SEX	3.8%	8.3%	6.2%
		% of Total	1.8%	4.4%	6.2%
	Yes	Count	6	2	8
		% within Currently use smokeless tobacco	75.0%	25.0%	100.0%
		% within SEX	2.5%	.8%	1.6%
		% of Total	1.2%	.4%	1.6%
	No	Count	222	240	462
		% within Currently use smokeless tobacco	48.1%	51.9%	100.0%
		% within SEX	93.7%	90.9%	92.2%
		% of Total	44.3%	47.9%	92.2%
Total		Count	237	264	501
		% within Currently use smokeless tobacco	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

ALCOHOL CONSUMPTION

Persons that have ever consumed drink containing alcohol

URBAN: 35.4 % of respondents in the urban area agreed to having ever taken a drink containing alcohol such as wine, beer, spirits/local brew, fermented cider etc. 24% within the female population have taken alcoholic drinks and 37.2% of the population that drink alcohol are females. Among the males, 48.3 % have ever taken alcoholic drinks and 62.8 % of the population that have ever taken alcohol are males. (Table 29a)

RURAL: 27.1 % of respondents in the rural area agreed to having ever taken a drink containing alcohol such as wine, beer, spirits/local brew, fermented cider etc. Among the female population, 12.9% have ever taken alcoholic drinks and 25% of the population that have ever taken alcoholic drink are females. Among the males, 43.0 % have taken alcoholic drinks and 75% of the drinking population are male. (Table 29c)

Ever consumed drink containing alcohol by sex - URBAN

			SEX		
			Male	Female	Total
Ever consumed drink containing alcohol	Yes	Count	115	68	183
		% within Ever consumed drink containing alcohol	62.8%	37.2%	100.0%
		% within SEX	48.3%	24.4%	35.4%
		% of Total	22.2%	13.2%	35.4%
	No	Count	123	211	334
		% within Ever consumed drink containing alcohol	36.8%	63.2%	100.0%
		% within SEX	51.7%	75.6%	64.6%
		% of Total	23.8%	40.8%	64.6%
Total		Count	238	279	517
		% within Ever consumed drink containing alcohol	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Ever consumed drink containing alcohol by sex - RURAL

			SEX		
			Male	Female	Total
Ever consumed drink containing alcohol	Yes	Count	102	34	136
		% within Ever consumed drink containing alcohol	75.0%	25.0%	100.0%
		% within SEX	43.0%	12.9%	27.1%
		% of Total	20.4%	6.8%	27.1%
	No	Count	135	230	365
		% within Ever consumed drink containing alcohol	37.0%	63.0%	100.0%
		% within SEX	57.0%	87.1%	72.9%
		% of Total	26.9%	45.9%	72.9%
Total		Count	237	264	501
		% within Ever consumed drink containing alcohol	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Persons that have consumed alcoholic drink in the past 1-year among those that have ever consumed drink containing alcohol

URBAN: Table 30a. The proportion of persons that have taken alcoholic drinks in the past 12 months among those that have taken alcohol is 77.6 %. 36.6 % of these persons are females and within females that have ever taken alcohol, 76.5 % have done so in the past 12 months. 63.4 % of these persons are males and within males that have ever taken alcohol, 78.3 % have done so in the past 12 months.

RURAL: Table 30b. The proportion of persons that have taken alcoholic drinks in the past 12 months among those that have taken alcohol is 91.9 %. 24 % of these persons are females and within females that have ever taken alcohol, 88.2 % have done so in the past 12 months. 76 % of these persons are males and within males that have ever taken alcohol, 93.1 % have done so in the past 12 months.

Consumed alchohol in last 1 year amongst those that have ever consumed alcohol by sex - URBAN

			SEX		
			Male	Female	Total
Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	Yes	Count	90	52	142
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	63.4%	36.6%	100.0%
		% within SEX	78.3%	76.5%	77.6%
		% of Total	49.2%	28.4%	77.6%
	No	Count	25	16	41
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	61.0%	39.0%	100.0%
		% within SEX	21.7%	23.5%	22.4%
		% of Total	13.7%	8.7%	22.4%
Total		Count	115	68	183
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	62.8%	37.2%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	62.8%	37.2%	100.0%

Consumed alchohol in last 1 year amongst those that have ever consumed alcohol by sex - RURAL

			SEX		
			Male	Female	Total
Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	Yes	Count	95	30	125
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	76.0%	24.0%	100.0%
		% within SEX	93.1%	88.2%	91.9%
		% of Total	69.9%	22.1%	91.9%
	No	Count	7	4	11
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	63.6%	36.4%	100.0%
		% within SEX	6.9%	11.8%	8.1%
		% of Total	5.1%	2.9%	8.1%
Total		Count	102	34	136
		% within Consumed alchohol in last 1 year amongst those that have ever consumed alcohol	75.0%	25.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	75.0%	25.0%	100.0%

Average amount of alcohol taken on a single day

URBAN Table 32a: 53.7% respondents who take alcohol drinks have 1-3 alcoholic drinks during one day. 14.6% take 4-6 drinks a day. 4.9% take 7-9 drinks and 9.8% take 10-12 drinks a day.
RURAL Table 32b: 81.8% of respondents who take alcoholic drinks have 1-3 alcoholic drinks during one day. 9.1% take 4-6 drinks a day. 9.1% is missing data.

Maximum amount of alcoholic drinks/beverages on single occasion

URBAN Table 41a: The highest percentage of alcoholic drinkers in the urban admitted to having had a maximum of 1-4 alcoholic drinks in a day with a proportion of 64.5%.
RURAL Table 41c: The highest percentage of alcoholic drinkers in the urban admitted to having had a maximum of 1-4 alcoholic drinks in a day with a proportion of 61%.

Advised to reduce alcohol intake in past 1 year

URBAN Table 42a: Among the 183 persons that responded to this question in the urban area, 27.3% had been advised to reduce alcohol intake. 82% of these persons are males and 18% are females. Among the males, 35.7% of males had been advised to reduce alcohol intake. Among the females, 13.2% of females had been advised to reduce alcohol intake.
RURAL Table 42a: Among the 136 persons that responded to this question in the rural area, 32.4% had been advised to reduce alcohol intake. 88.6% of these persons are males and 11.4% are females. Among the males, 38.3% of males had been advised to reduce alcohol intake. Among the females, 14.7% of females had been advised to reduce alcohol intake.

Advised to drink less alcohol in past 1 year among that drink alcoholic drinks by URBAN

			SEX		
			Male	Female	Total
Adviced to drink alcohol in past 1 year	Yes	Count	41	9	50
		% within Adviced to drink less alcohol in past 1	82.0	18.0	100.0
		% within SEX	35.7	13.2	27.3
		% of Total	22.4	4.9	27.3
	No	Count	74	59	133
		% within Adviced to drink less alcohol in past 1	55.6	44.4	100.0
		% within SEX	64.3	86.8	72.7
		% of Total	40.4	32.2	72.7
Total		Count	115	68	183
		% within Adviced to drink less alcohol in past 1	62.8	37.2	100.0
		% within SEX	100.0	100.0	100.0
		% of Total	62.8	37.2	100.0

Adviced to drink less alcohol in past 1 yearamong those that drink alcoholic drinks by sex - RURAL

			SEX		
			Male	Female	Total
Adviced to drink less alcohol in past 1 year	Yes	Count	39	5	44
		% within Adviced to drink less alcohol in past 1 year	88.6%	11.4%	100.0%
		% within SEX	38.2%	14.7%	32.4%
		% of Total	28.7%	3.7%	32.4%
	No	Count	63	29	92
		% within Adviced to drink less alcohol in past 1 year	68.5%	31.5%	100.0%
		% within SEX	61.8%	85.3%	67.6%
		% of Total	46.3%	21.3%	67.6%
Total		Count	102	34	136
		% within Adviced to drink less alcohol in past 1 year	75.0%	25.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	75.0%	25.0%	100.0%

NUTRITION

Fresh vegetables eaten in days per week

URBAN Table 43a: The average number of days that fresh vegetables are eaten in the urban area is 1 - 3 days. There were not much differences across marital status, years in school, level of education, occupation, religion, or housing type in the number of days fresh vegetables are eaten.
RURAL Table 43b: The average number of days that fresh vegetables are eaten in the rural area is 1.2 days and there was not much differences across Marital status, years in school, level of education, occupation, religion, or housing type in the number of days fresh vegetables are eaten.

Type of oil/fat mostly used in meal preparation

URBAN Table 66b: The most common oil/fat used in cooking at home was palm oil, which had a proportion of 53.6% among male respondents, 64% among female respondents and 60.5% among all the respondents. This was followed by Vegetable oil (no brand) with a proportion of 47.9% of the total respondents of which 30.8% were males and 52.3% were females.

RURAL Table 66b: The most common oil/fat used in cooking at home was palm oil, which had a proportion of 86.5% among male respondents, 92.4% among female respondents and 89.6% among all the respondents. This was followed by Vegetable oil (no brand) with a proportion of 44.7 % of the total respondents of which 35.4% were males and 53.0% were females.

The least used oils/fat used for cooking at home were cholesterol free vegetable oil, butter, margarine, animal fat (lard) and others.

Use of cholesterol free vegetable oil

URBAN: 21.3% of respondents in this area used cholesterol free vegetable oil to cook meals. Of these persons, 60 % were females and 40 % males.
RURAL: 2.8 % of respondents in the rural area used cholesterol free vegetable oil to cook meals. These were equally distributed among males and females.

Use of cholesterol free vegetable oil to prepare meals by sex - URBAN

			SEX		
			Male	Female	Total
Use of cholesterol free vegetable oil to prepare meals	Yes	Count	44	66	110
		% within Use of cholesterol free vegetable oil to prepare meals	40.0%	60.0%	100.0%
		% within SEX	18.5%	23.7%	21.3%
		% of Total	8.5%	12.8%	21.3%
	No	Count	194	213	407
		% within Use of cholesterol free vegetable oil to prepare meals	47.7%	52.3%	100.0%
		% within SEX	81.5%	76.3%	78.7%
		% of Total	37.5%	41.2%	78.7%
Total		Count	238	279	517
		% within Use of cholesterol free vegetable oil to prepare meals	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Use of cholesterol free vegetable oil to prepare meals by sex - URBAN

			SEX		
			Male	Female	Total
Use of cholesterol free vegetable oil to prepare meals	Yes	Count	7	7	14
		% within Use of cholesterol free vegetable oil to prepare meals	50.0%	50.0%	100.0%
		% within SEX	3.0%	2.7%	2.8%
		% of Total	1.4%	1.4%	2.8%
	No	Count	230	257	487
		% within Use of cholesterol free vegetable oil to prepare meals	47.2%	52.8%	100.0%
		% within SEX	97.0%	97.3%	97.2%
		% of Total	45.9%	51.3%	97.2%
Total		Count	237	264	501
		% within Use of cholesterol free vegetable oil to prepare meals	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Frequency of consumption of sweet soft drinks

Majority of total respondents were found to take sweet soft drinks at a frequency of 1-3 days a week.
URBAN Table 78a : 40.8% of respondents in the urban area had sweet soft drinks 1-3 days a week while 15.5% indulged every day. 5.4% did not take sweet soft drinks. The younger age groups were found to have the highest number of those that take sweet soft drinks every day. The highest proportion was 18.8% were males between the ages of 25-34 years.

RURAL Table 78c: 47.9% of respondents in the rural area had sweet soft drinks 1-3 days a week while 17.8% indulged every day. 5.4% did not take sweet soft drinks. The younger age groups were found to have the highest number of those that take it every day. The highest proportion was 24.7% were females between the ages of 15-24 years.

Frequency of consumption of sweet soft drinks by sex - URBAN

			SEX		
			Male	Female	Total
Frequency of consumption of sweet soft drinks	everyday	Count	38	42	80
		% within Frequency of consumption of sweet soft drinks	47.5%	52.5%	100.0%
		% within SEX	16.0%	15.1%	15.5%
		% of Total	7.4%	8.1%	15.5%
	4-6 days	Count	25	20	45
		% within Frequency of consumption of sweet soft drinks	55.6%	44.4%	100.0%
		% within SEX	10.5%	7.2%	8.7%
		% of Total	4.8%	3.9%	8.7%
	1-3 days	Count	86	125	211
		% within Frequency of consumption of sweet soft drinks	40.8%	59.2%	100.0%
		% within SEX	36.1%	44.8%	40.8%
		% of Total	16.6%	24.2%	40.8%
	rarely	Count	73	80	153
		% within Frequency of consumption of sweet soft drinks	47.7%	52.3%	100.0%
		% within SEX	30.7%	28.7%	29.6%
		% of Total	14.1%	15.5%	29.6%
	never take soft drinks	Count	16	12	28
		% within Frequency of consumption of sweet soft drinks	57.1%	42.9%	100.0%
		% within SEX	6.7%	4.3%	5.4%
		% of Total	3.1%	2.3%	5.4%
Total		Count	238	279	517
		% within Frequency of consumption of sweet soft drinks	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Frequency of consumption of sweet soft drinks by sex - RURAL

			SEX		
			Male	Female	Total
Frequency of consumption of sweet soft drinks	everyday	Count	36	53	89
		% within Frequency of consumption of sweet soft drinks	40.4%	59.6%	100.0%
		% within SEX	15.2%	20.1%	17.8%
		% of Total	7.2%	10.6%	17.8%
	4-6 days	Count	34	23	57
		% within Frequency of consumption of sweet soft drinks	59.6%	40.4%	100.0%
		% within SEX	14.3%	8.7%	11.4%
		% of Total	6.8%	4.6%	11.4%
	1-3 days	Count	107	133	240
		% within Frequency of consumption of sweet soft drinks	44.6%	55.4%	100.0%
		% within SEX	45.1%	50.4%	47.9%
		% of Total	21.4%	26.5%	47.9%
	rarely	Count	46	42	88
		% within Frequency of consumption of sweet soft drinks	52.3%	47.7%	100.0%
		% within SEX	19.4%	15.9%	17.6%
		% of Total	9.2%	8.4%	17.6%
	never take soft drinks	Count	14	13	27
		% within Frequency of consumption of sweet soft drinks	51.9%	48.1%	100.0%
		% within SEX	5.9%	4.9%	5.4%
		% of Total	2.8%	2.6%	5.4%
Total		Count	237	264	501
		% within Frequency of consumption of sweet soft drinks	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Highest number of sweet soft drinks taken in a day

Majority of the respondents in both urban and rural area usually took a bottle of sweet soft drink in a day.
URBAN Table 79a: 39.1% took a bottle of sweet soft drink maximum in a day. 14.5% do not take sweet soft drinks and 2.3% take more than 5 bottles of sweet soft drinks.
RURAL Table 79B: 28.5% took a bottle of sweet soft drink maximum in a day. 12.2% do not take sweet soft drinks and 2.9% take more than 5 bottles of sweet soft drinks.

Consumption of sweets/chocolate in a week

URBAN Table 80a: A greater proportion of respondents in the urban area rarely take sweets/chocolate in a week with 38.9% while 35.4% never take sweet/chocolate. 6.6 % take chocolate everyday. This proportion is highest in the younger age groups.

RURAL Table 80c: The greatest proportion of respondents in the rural area never take sweets/chocolate with 29.9% while 25.5% rarely take sweets/chocolate in a week and 25.5% take sweets/chocolate on 1-3 days a week. 13.9 % take sweets/chocolate everyday. This proportion is also highest in the younger age groups in this sector.

Spoonfuls of sugar used in one cup of coffee/tea/beverage

URBAN Table 83a: A larger proportion of respondents take more than 2 cubes or teaspoonfuls of sugar in a cup of coffee/tea/beverage with 34.2% while 33.7% take 2 cubes or teaspoons of sugar in same cup. These proportions are more in the younger age groups in both males and females. 15.5% take less than 1 cube or 1 cube in same cup.
RURAL Table 83b: A larger proportion of respondents take 2 cubes or teaspoonfuls of sugar in a cup of coffee/tea/beverage with 23.6% while 20.4% take 2 cubes or teaspoons of sugar in same cup. These proportions are more in the younger age groups in both males and females. 15.5% take less than 1 cube or 1 cube in same cup. 15.5% take less than 1 cube or 1 cube in same cup.

Frequency of eating fast foods

URBAN: The highest percentage of 49.9 % rarely took fast food followed by those who took fast foods every 1-3 days with a proportion of 28.8 %. The least proportion of 3.9 % took fast foods every 4-6 days and only 4.1 % took them everyday.
RURAL: The highest percentage of 36.3 % rarely took fast food followed by those who rarely took fast foods with a proportion of 30.5 %. The least proportion of 9.0 % took fast foods every 4-6 days and 13 % took them everyday.

Frequency of eating fast foods by sex - URBAN

			SEX		
			Male	Female	Total
Frequency of eating fast foods	everyday	Count	8	13	21
		% within Frequency of eating fast foods	38.1%	61.9%	100.0%
		% within SEX	3.4%	4.7%	4.1%
		% of Total	1.5%	2.5%	4.1%
	4-6 days/week	Count	12	8	20
		% within Frequency of eating fast foods	60.0%	40.0%	100.0%
		% within SEX	5.0%	2.9%	3.9%
		% of Total	2.3%	1.5%	3.9%
	1-3 days/week	Count	74	75	149
		% within Frequency of eating fast foods	49.7%	50.3%	100.0%
		% within SEX	31.1%	26.9%	28.8%
		% of Total	14.3%	14.5%	28.8%
	rarely	Count	119	135	254
		% within Frequency of eating fast foods	46.9%	53.1%	100.0%
		% within SEX	50.0%	48.4%	49.1%
		% of Total	23.0%	26.1%	49.1%
	never	Count	25	48	73
		% within Frequency of eating fast foods	34.2%	65.8%	100.0%
		% within SEX	10.5%	17.2%	14.1%
		% of Total	4.8%	9.3%	14.1%
Total		Count	238	279	517
		% within Frequency of eating fast foods	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Frequency of eating fast foods by sex - RURAL

			SEX		
			Male	Female	Total
Frequency of eating fast foods	everyday	Count	24	45	69
		% within Frequency of eating fast foods	34.8%	65.2%	100.0%
		% within SEX	10.1%	17.0%	13.8%
		% of Total	4.8%	9.0%	13.8%
	4-6 days/week	Count	25	20	45
		% within Frequency of eating fast foods	55.6%	44.4%	100.0%
		% within SEX	10.5%	7.6%	9.0%
		% of Total	5.0%	4.0%	9.0%
	1-3 days/week	Count	93	89	182
		% within Frequency of eating fast foods	51.1%	48.9%	100.0%
		% within SEX	39.2%	33.7%	36.3%
		% of Total	18.6%	17.8%	36.3%
	rarely	Count	81	72	153
		% within Frequency of eating fast foods	52.9%	47.1%	100.0%
		% within SEX	34.2%	27.3%	30.5%
		% of Total	16.2%	14.4%	30.5%
	never	Count	14	38	52
		% within Frequency of eating fast foods	26.9%	73.1%	100.0%
		% within SEX	5.9%	14.4%	10.4%
		% of Total	2.8%	7.6%	10.4%
Total		Count	237	264	501
		% within Frequency of eating fast foods	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Frequency of adding salt to already prepared food

URBAN: In the urban area, 7.4% of respondents admitted to always adding salt to already prepared food without tasting for salt. 15.9% sometimes added salt while 76.8% never added salt to already prepared food.
RURAL: In the rural area, 11.6% admitted to always adding salt to already prepared food without tasting for salt. 26.7% sometimes added salt while 61.7% never added salt to food.

Urban - Add extra salt

		Frequency	Percent	Valid Percent	Cumulative
Add extra salt	Always	38	7.4	7.4	7.4
	Sometimes	82	15.9	15.9	23.2
	Never	397	76.8	76.8	100.0
	Total	517	100.0	100.0	

Rural - Add extra salt

		Frequency	Percent	Valid Percent	Cumulative Percent
Add extra salt	Always	58	11.6	11.6	11.6
	Sometimes	134	26.7	26.7	38.3
	Never	309	61.7	61.7	100.0
	Total	501	100.0	100.0	

Use of MSG (Mono-Sodium Glutamate) taste enhancers

URBAN 82.2% of total respondents admitted to using MSG taste enhancers. 57.9% of these people are females and 42.1% are males. 7.4% admitted to sometimes using MSG taste enhancers while 10.4% never use MSG taste enhancers.
RURAL 83.6% of total respondents admitted to using MSG taste enhancers. 55.8% of these people are females and 44.2% are males. 9.0% admitted to sometimes using MSG taste enhancers while 7.4% never use MSG taste enhancers.

Urban - Use MSG taste enhancers * Sex Crosstabulation

			Sex		
			Male	Female	Total
MSG taste enhancers	Always	Count	179	246	425
		% within MSG taste enhancers	42.1%	57.9%	100.0%
		% within Sex	75.2%	88.2%	82.2%
		% of Total	34.6%	47.6%	82.2%
	Sometimes	Count	22	16	38
		% within MSG taste enhancers	57.9%	42.1%	100.0%
		% within Sex	9.2%	5.7%	7.4%
		% of Total	4.3%	3.1%	7.4%
	Never	Count	37	17	54
		% within MSG taste enhancers	68.5%	31.5%	100.0%
		% within Sex	15.5%	6.1%	10.4%
		% of Total	7.2%	3.3%	10.4%
Total		Count	238	279	517
		% within MSG taste enhancers	46.0%	54.0%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Rural - Use MSG taste enhancers * Sex Crosstabulation

			Sex		
			Male	Female	Total
MSG taste enhancers	Always	Count	185	234	419
		% within MSG taste enhancers	44.2%	55.8%	100.0%
		% within Sex	78.1%	88.6%	83.6%
		% of Total	36.9%	46.7%	83.6%
	Sometimes	Count	34	11	45
		% within MSG taste enhancers	75.6%	24.4%	100.0%
		% within Sex	14.3%	4.2%	9.0%
		% of Total	6.8%	2.2%	9.0%
	Never	Count	18	19	37
		% within MSG taste enhancers	48.6%	51.4%	100.0%
		% within Sex	7.6%	7.2%	7.4%
		% of Total	3.6%	3.8%	7.4%
Total		Count	237	264	501
		% within MSG taste enhancers	47.3%	52.7%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Use White Maggi/Ajinomoto

URBAN: 23.0% of the respondents use white maggi to cook meals. Of these persons, 35.3% are males while 64.7% are females. 13.0% did not know if their meals were prepared with white maggi.
RURAL: 21.4% of the respondents use white maggi to cook meals. Of these persons, 56.1% are males while 43.9% are females. 2.8% did not know if their meals were prepared with white maggi.

Urban - Use White Maggi/Ajinomoto by Sex

			Sex		
			Male	Female	Total
Use Maggi/Ajinomoto	Yes	Count	42	77	119
		% within Use Maggi/Ajinomot	35.3	64.7	100.0
		% within Sex	17.6	27.6	23.0
		% of Total	8.1	14.9	23.0
	No	Count	136	195	331
		% within Use Maggi/Ajinomoto	41.1	58.9	100.0
		% within Sex	57.1	69.9	64.0
		% of Total	26.3	37.7	64.0
	Dont know	Count	60	7	67
		% within Use Maggi/Ajinomoto	89.6	10.4	100.0
		% within Sex	25.2	2.5	13.0
		% of Total	11.6	1.4	13.0
Total		Count	238	279	517
		% within Use Maggi/Ajinomoto	46.0	54.0	100.0
		% within Sex	100.0	100.0	100.0
		% of Total	46.0	54.0	100.0

Use White Maggi/Ajinomoto by sex - RURAL

			Sex		
			Male	Femal	Total
Use White Maggi/Ajinomoto	Yes	Count	60	47	107
		% within Use White Maggi/Ajinomo	56.1%	43.9%	100.0%
		% within	25.3%	17.8%	21.4%
		% of	12.0%	9.4%	21.4%
	No	Count	167	213	380
		% within Use White Maggi/Ajinomo	43.9%	56.1%	100.0%
		% within	70.5%	80.7%	75.8%
		% of	33.3%	42.5%	75.8%
	Dont know	Count	10	4	14
		% within Use White Maggi/Ajinomo	71.4%	28.6%	100.0%
		% within	4.2%	1.5%	2.8%
		% of	2.0%	.8%	2.8%
Total		Count	237	264	501
		% within Use White Maggi/Ajinomo	47.3%	52.7%	100.0%
		% within	100.0%	100.0%	100.0%
		% of	47.3%	52.7%	100.0%

Persons that eat breakfast

Breakfast was found to be an important meal as most of the respondents took breakfast.
URBAN: 91.7 % of respondents took breakfast of which 45.6 % are males and 54.4 % are females. Within males, 90.8 % are took breakfast while 9.2 % did not. Amongst females, 92.5 % took breakfast while 7.5 % did not.
RURAL: 93.6 % of respondents took breakfast of which 45.6 % are males and 54.4 % are females. Within males, 90.8% are took breakfast while 9.2 % did not. Amongst females, 92.5 % took breakfast while 7.5 % did not.

Persons that eat breakfast by sex - URBAN

			Sex		
			Male	Female	Total
Persons that eat breakfast	Yes	Count	216	258	474
		% within Persons that eat breakfast	45.6	54.4	100.0
		% within Sex	90.8	92.5	91.7
		% of Total	41.8	49.9	91.7
	No	Count	22	21	43
		% within Persons that eat breakfast	51.2	48.8	100.0
		% within Sex	9.2	7.5	8.3
		% of Total	4.3	4.1	8.3
Total		Count	238	279	517
		% within Persons that eat breakfast	46.0	54.0	100.0
		% within Sex	100.0	100.0	100.0
		% of Total	46.0	54.0	100.0

Persons that eat breakfast by sex - RURAL

			Sex		
			Male	Female	Total
Persons that eat breakfast	Yes	Count	22	24	46
		% within Persons that eat breakfast	47.8	52.2	100.0
		% within Sex	94.5	92.8	93.6
		% of Total	44.7	48.9	93.6
	No	Count	13	19	32
		% within Persons that eat breakfast	40.6	59.4	100.0
		% within Sex	5.5	7.2	6.4
		% of Total	2.6	3.8	6.4
Total		Count	23	26	50
		% within Persons that eat breakfast	47.3	52.7	100.0
		% within Sex	100.0	100.0	100.0
		% of Total	47.3	52.7	100.0

Persons advised to change diet for health reasons

URBAN: A total of 15.7% of respondents had been advised to change their diet for health reasons. 59.3% of them were males and 40.7% females.
RURAL: A total of 9.2% of respondents had been advised to change their diet for health reasons. 63% of them were males and 37% females.

Urban - Advice to change diet for health reasons * Sex Crosstabulation

			Sex		
			Male	Female	Total
Advice to change diet for health reasons	Yes	Count	33	48	81
		% within Advice to change diet for health reasons	40.7%	59.3%	100.0%
		% within Sex	13.9%	17.2%	15.7%
		% of Total	6.4%	9.3%	15.7%
	No	Count	205	231	436
		% within Advice to change diet for health reasons	47.0%	53.0%	100.0%
		% within Sex	86.1%	82.8%	84.3%
		% of Total	39.7%	44.7%	84.3%
Total		Count	238	279	517
		% within Advice to change diet for health reasons	46.0%	54.0%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Rural - Advice to change diet for health reasons in last 1 year * Sex Crosstabulation

			Sex		
			Male	Female	Total
Advice to change diet for health reasons	Yes	Count	29	17	46
		% within Advice to change diet for health reasons	63.0%	37.0%	100.0%
		% within Sex	12.2%	6.4%	9.2%
		% of Total	5.8%	3.4%	9.2%
	No	Count	208	247	455
		% within Advice to change diet for health reasons	45.7%	54.3%	100.0%
		% within Sex	87.8%	93.6%	90.8%
		% of Total	41.5%	49.3%	90.8%
Total		Count	237	264	501
		% within Advice to change diet for health reasons	47.3%	52.7%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

PHYSICAL ACTIVITY

Work involves vigorous physical activity

There were more respondents in the rural area whose work involves vigorous physical activity.
URBAN: 17.8 % of respondents admitted their work involves vigorous physical activity. Of these persons, 62% were males and 38% were females. Within females, 12.5 % admitted their work involved vigorous physical activity while within males, 23.9 % admitted.

URBAN: 25.9 % of respondents admitted their work involves vigorous physical activity. Of these persons, 70.8 % were males and 29.2 % were females. Within females, 14.4 % admitted their work involved vigorous physical activity while within males, 38.8 % admitted.

Work involves vigorous physical activity by sex - URBAN

			SEX		
			Male	Female	Total
Work involves vigorous physical activity	Yes	Count	57	35	92
		% within Work involves vigorous physical activity	62.0%	38.0%	100.0%
		% within SEX	23.9%	12.5%	17.8%
		% of Total	11.0%	6.8%	17.8%
	No	Count	181	244	425
		% within Work involves vigorous physical activity	42.6%	57.4%	100.0%
		% within SEX	76.1%	87.5%	82.2%
		% of Total	35.0%	47.2%	82.2%
Total		Count	238	279	517
		% within Work involves vigorous physical activity	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Work involves vigorous physical activity by sex - RURAL

			SEX		
			Male	Female	Total
Work involves vigorous physical activity	Yes	Count	92	38	130
		% within Work involves vigorous physical activity	70.8%	29.2%	100.0%
		% within SEX	38.8%	14.4%	25.9%
		% of Total	18.4%	7.6%	25.9%
	No	Count	145	226	371
		% within Work involves vigorous physical activity	39.1%	60.9%	100.0%
		% within SEX	61.2%	85.6%	74.1%
		% of Total	28.9%	45.1%	74.1%
Total		Count	237	264	501
		% within Work involves vigorous physical activity	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Persons that walk/cycle/pedal to and from places for at least 10 consecutive minutes

URBAN: 47.2 % of respondents' walk/cycle/pedal to and from places for at least 10 consecutive minutes. Of these persons, 52% were males and 48% were females. Within females, 41.9 % admitted to walking/cycling/pedaling for at least 10 consecutive minutes while within males, 53.4 % admitted.
RURAL: 51.9 % of respondents' walk/cycle/pedal to and from places for at least 10 consecutive minutes. Of these persons, 52.7 % were males and 47.3% were females. Within females, 46.6 % admitted their work involved vigorous physical activity while within males, 57.8 % admitted

Walk/cycle/pedal to and fro for at least 10 mins by sex - URBAN

			SEX		
			Male	Female	Total
Walk/cycle/pedal to and fro for at least 10 mins	Yes	Count	127	117	244
		% within Walk/cycle/pedal to and fro for at least 10 mins	52.0%	48.0%	100.0%
		% within SEX	53.4%	41.9%	47.2%
		% of Total	24.6%	22.6%	47.2%
	No	Count	111	162	273
		% within Walk/cycle/pedal to and fro for at least 10 mins	40.7%	59.3%	100.0%
		% within SEX	46.6%	58.1%	52.8%
		% of Total	21.5%	31.3%	52.8%
Total		Count	238	279	517
		% within Walk/cycle/pedal to and fro for at least 10 mins	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Walk/cycle/pedal to and fro for at least 10 mins by sex - RURAL

			SEX		
			Male	Female	Total
Walk/cycle/pedal to and fro for at least 10 mins	Yes	Count	137	123	260
		% within Walk/cycle/pedal to and fro for at least 10 mins	52.7%	47.3%	100.0%
		% within SEX	57.8%	46.6%	51.9%
		% of Total	27.3%	24.6%	51.9%
	No	Count	100	141	241
		% within Walk/cycle/pedal to and fro for at least 10 mins	41.5%	58.5%	100.0%
		% within SEX	42.2%	53.4%	48.1%
		% of Total	20.0%	28.1%	48.1%
Total		Count	237	264	501
		% within Walk/cycle/pedal to and fro for at least 10 mins	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

TRAFFIC SAFETY

Use of seat belt while driving or as a passenger in front seat

URBAN: The highest proportion of respondents 61.5 % admitted to never using seat belts either while driving or as passengers while 11.8 % almost always used one.
RURAL: The highest proportion of respondents 66.1 % admitted to never using seat belts either while driving or as passengers while 7.2 % almost always used one.

Use of seat belt while driving/front seat passenger by sex - URBAN

			SEX		
			Male	Female	Total
Use of seat belt while driving/front seat passenger	almost always	Count	49	12	61
		% within Use of seat belt while driving/front seat passenger	80.3%	19.7%	100.0%
		% within SEX	20.6%	4.3%	11.8%
		% of Total	9.5%	2.3%	11.8%
	sometimes	Count	38	19	57
		% within Use of seat belt while driving/front seat passenger	66.7%	33.3%	100.0%
		% within SEX	16.0%	6.8%	11.0%
		% of Total	7.4%	3.7%	11.0%
	never	Count	118	200	318
		% within Use of seat belt while driving/front seat passenger	37.1%	62.9%	100.0%
		% within SEX	49.6%	71.7%	61.5%
		% of Total	22.8%	38.7%	61.5%
	I do not have a seat belt in my car	Count	2	2	4
		% within Use of seat belt while driving/front seat passenger	50.0%	50.0%	100.0%
		% within SEX	.8%	.7%	.8%
		% of Total	.4%	.4%	.8%
	I never use a car	Count	31	46	77
		% within Use of seat belt while driving/front seat passenger	40.3%	59.7%	100.0%
		% within SEX	13.0%	16.5%	14.9%
		% of Total	6.0%	8.9%	14.9%
Total		Count	238	279	517
		% within Use of seat belt while driving/front seat passenger	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Use of seat belt while driving/front seat passenger by sex - RURAL

			SEX		
			Male	Female	Total
Use of seat belt while driving/front seat passenger	almost always	Count	31	5	36
		% within Use of seat belt while driving/front seat passenger	86.1%	13.9%	100.0%
		% within SEX	13.1%	1.9%	7.2%
		% of Total	6.2%	1.0%	7.2%
	sometimes	Count	28	12	40
		% within Use of seat belt while driving/front seat passenger	70.0%	30.0%	100.0%
		% within SEX	11.8%	4.5%	8.0%
		% of Total	5.6%	2.4%	8.0%
	never	Count	144	187	331
		% within Use of seat belt while driving/front seat passenger	43.5%	56.5%	100.0%
		% within SEX	60.8%	70.8%	66.1%
		% of Total	28.7%	37.3%	66.1%
	I do not have a seat belt in my car	Count	1	2	3
		% within Use of seat belt while driving/front seat passenger	33.3%	66.7%	100.0%
		% within SEX	.4%	.8%	.6%
		% of Total	.2%	.4%	.6%
	I never use a car	Count	33	58	91
		% within Use of seat belt while driving/front seat passenger	36.3%	63.7%	100.0%
		% within SEX	13.9%	22.0%	18.2%
		% of Total	6.6%	11.6%	18.2%
Total		Count	237	264	501
		% within Use of seat belt while driving/front seat passenger	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

VIOLENCE

Weapons owned by respondents

Majority of respondents were found to own knives. Very few owned guns, arrows, traditional charms, and scissors. No females in the urban area owned arrows, guns or traditional charms.
URBAN: 95.5% owned knives of which 43.8% males and 56.2% females. Under 1% owned guns, arrows and traditional charms while 3.5% owned scissors.
RURAL: 92.8% owned knives of which 54.5% are males and 45.5% females. 1.6% owned arrows, 2.4% owned traditional charms and 3.2% owned scissors.

Persons and weapons owned by sex - URBAN

			SEX		
			Male	Female	Total
Persons and weapons owned	knife	Count	121	155	276
		% within Persons and weapons owned	43.8%	56.2%	100.0%
		% within SEX	92.4%	98.1%	95.5%
		% of Total	41.9%	53.6%	95.5%
	arrow	Count	1		1
		% within Persons and weapons owned	100.0%		100.0%
		% within SEX	.8%		.3%
		% of Total	.3%		.3%
	guns	Count	1		1
		% within Persons and weapons owned	100.0%		100.0%
		% within SEX	.8%		.3%
		% of Total	.3%		.3%
	traditional charms	Count	1		1
		% within Persons and weapons owned	100.0%		100.0%
		% within SEX	.8%		.3%
		% of Total	.3%		.3%
	scissors	Count	7	3	10
		% within Persons and weapons owned	70.0%	30.0%	100.0%
		% within SEX	5.3%	1.9%	3.5%
		% of Total	2.4%	1.0%	3.5%
Total		Count	131	158	289
		% within Persons and weapons owned	45.3%	54.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	45.3%	54.7%	100.0%

Persons and weapons owned by sex - RURAL

			SEX		
			Male	Female	Total
Persons and weapons owned	knife	Count	127	106	233
		% within Persons and weapons owned	54.5%	45.5%	100.0%
		% within SEX	92.7%	93.0%	92.8%
		% of Total	50.6%	42.2%	92.8%
	arrow	Count	2	2	4
		% within Persons and weapons owned	50.0%	50.0%	100.0%
		% within SEX	1.5%	1.8%	1.6%
		% of Total	.8%	.8%	1.6%
	traditional charms	Count	4	2	6
		% within Persons and weapons owned	66.7%	33.3%	100.0%
		% within SEX	2.9%	1.8%	2.4%
		% of Total	1.6%	.8%	2.4%
	scissors	Count	4	4	8
		% within Persons and weapons owned	50.0%	50.0%	100.0%
		% within SEX	2.9%	3.5%	3.2%
		% of Total	1.6%	1.6%	3.2%
Total		Count	137	114	251
		% within Persons and weapons owned	54.6%	45.4%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	54.6%	45.4%	100.0%

Place of experience/witness of armed robbery attack

The most common place most people who have ever experienced or witnessed a robbery attack in both urban and rural areas were in public places.
URBAN: In this area, 61.9% of these people experienced/witnessed armed robbery attack in public places. This was followed by in the home. 1.3 % had experienced/witnessed armed robbery attacks in the home, office, car, and public places.
RURAL: In this area, 47.8% of these people experienced/witnessed armed robbery attack in public places. This was followed by in the home with a proportion of 31.5 %. None of the respondents had ever experienced/witnessed armed robbery attacks in all the stated places.

Place of experience/witness of armed robbery attack by sex - URBAN

			SEX		
			Male	Female	Total
Place of experience/witness of armed robbery attack	home	Count	20	16	36
		% within Place of experience/witness of armed robbery attack	55.6%	44.4%	100.0%
		% within SEX	21.5%	23.9%	22.5%
		% of Total	12.5%	10.0%	22.5%
	office	Count	2	6	8
		% within Place of experience/witness of armed robbery attack	25.0%	75.0%	100.0%
		% within SEX	2.2%	9.0%	5.0%
		% of Total	1.3%	3.8%	5.0%
	car	Count	11	4	15
		% within Place of experience/witness of armed robbery attack	73.3%	26.7%	100.0%
		% within SEX	11.8%	6.0%	9.4%
		% of Total	6.9%	2.5%	9.4%
	public place	Count	58	41	99
		% within Place of experience/witness of armed robbery attack	58.6%	41.4%	100.0%
		% within SEX	62.4%	61.2%	61.9%
		% of Total	36.3%	25.6%	61.9%
	all the above	Count	2		2
		% within Place of experience/witness of armed robbery attack	100.0%		100.0%
		% within SEX	2.2%		1.3%
		% of Total	1.3%		1.3%
Total		Count	93	67	160
		% within Place of experience/witness of armed robbery attack	58.1%	41.9%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	58.1%	41.9%	100.0%

Place of experience/witness of armed robbery attack by sex - RURAL

			SEX		
			Male	Female	Total
Place of experience/witness of armed robbery attack	home	Count	17	12	29
		% within Place of experience/witness of armed robbery attack	58.6%	41.4%	100.0%
		% within SEX	27.9%	38.7%	31.5%
		% of Total	18.5%	13.0%	31.5%
	office	Count	10	1	11
		% within Place of experience/witness of armed robbery attack	90.9%	9.1%	100.0%
		% within SEX	16.4%	3.2%	12.0%
		% of Total	10.9%	1.1%	12.0%
	car	Count	4	4	8
		% within Place of experience/witness of armed robbery attack	50.0%	50.0%	100.0%
		% within SEX	6.6%	12.9%	8.7%
		% of Total	4.3%	4.3%	8.7%
	public place	Count	30	14	44
		% within Place of experience/witness of armed robbery attack	68.2%	31.8%	100.0%
		% within SEX	49.2%	45.2%	47.8%
		% of Total	32.6%	15.2%	47.8%
Total		Count	61	31	92
		% within Place of experience/witness of armed robbery attack	66.3%	33.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	66.3%	33.7%	100.0%

ATTITUDE TO KILLING

Attitude to killing someone who has killed during a robbery

URBAN: Majority of respondents strongly agreed or agreed (31.7% and 31.3% respectively) to support a group that beats and kills someone who has killed in a robbery. 10.3 % were uncertain.
RURAL: Majority of respondents strongly agreed or agreed (14.8% and 21.2% respectively) to support a group that beats and kills someone who has killed in a robbery. 9.4 % were uncertain.

Approve if group beats & kills someone who has killed during a robbery by sex - URBAN

			SEX		
			Male	Female	Total
Approve if group beats & kills someone who has killed during a robbery	strongly agree	Count	80	84	164
		% within Approve if group beats & kills someone who has killed during a robbery	48.8%	51.2%	100.0%
		% within SEX	33.6%	30.1%	31.7%
		% of Total	15.5%	16.2%	31.7%
	agree	Count	73	89	162
		% within Approve if group beats & kills someone who has killed during a robbery	45.1%	54.9%	100.0%
		% within SEX	30.7%	31.9%	31.3%
		% of Total	14.1%	17.2%	31.3%
	uncertain	Count	22	31	53
		% within Approve if group beats & kills someone who has killed during a robbery	41.5%	58.5%	100.0%
		% within SEX	9.2%	11.1%	10.3%
		% of Total	4.3%	6.0%	10.3%
	disagree	Count	54	70	124
		% within Approve if group beats & kills someone who has killed during a robbery	43.5%	56.5%	100.0%
		% within SEX	22.7%	25.1%	24.0%
		% of Total	10.4%	13.5%	24.0%
	strongly disagree	Count	9	5	14
		% within Approve if group beats & kills someone who has killed during a robbery	64.3%	35.7%	100.0%
		% within SEX	3.8%	1.8%	2.7%
		% of Total	1.7%	1.0%	2.7%
Total		Count	238	279	517
		% within Approve if group beats & kills someone who has killed during a robbery	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Approve if group beats & kills someone who has killed during a robbery by sex - RURAL

			SEX		
			Male	Female	Total
Approve if group beats & kills someone who has killed during a robbery	strongly agree	Count	45	29	74
		% within Approve if group beats & kills someone who has killed during a robbery	60.8%	39.2%	100.0%
		% within SEX	19.0%	11.0%	14.8%
		% of Total	9.0%	5.8%	14.8%
	agree	Count	56	50	106
		% within Approve if group beats & kills someone who has killed during a robbery	52.8%	47.2%	100.0%
		% within SEX	23.6%	18.9%	21.2%
		% of Total	11.2%	10.0%	21.2%
	uncertain	Count	31	16	47
		% within Approve if group beats & kills someone who has killed during a robbery	66.0%	34.0%	100.0%
		% within SEX	13.1%	6.1%	9.4%
		% of Total	6.2%	3.2%	9.4%
	disagree	Count	94	150	244
		% within Approve if group beats & kills someone who has killed during a robbery	38.5%	61.5%	100.0%
		% within SEX	39.7%	56.8%	48.7%
		% of Total	18.8%	29.9%	48.7%
	strongly disagree	Count	11	19	30
		% within Approve if group beats & kills someone who has killed during a robbery	36.7%	63.3%	100.0%
		% within SEX	4.6%	7.2%	6.0%
		% of Total	2.2%	3.8%	6.0%
Total		Count	237	264	501
		% within Approve if group beats & kills someone who has killed during a robbery	47.3%	52.7%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

Attitude to someone killing criminals in community

Slightly above half of the respondents agreed or strongly agreed that they would approve if someone begins killing criminals in the community.
URBAN: 20.9 % strongly approved of someone killing criminals in the community. 31.1% agreed while 37.9% disagreed. 1.4% strongly disagreed. 8.7% were uncertain.
RURAL: 14.2% strongly approved of someone killing criminals in the community. 21.4% agreed while 49.5% disagreed. 9.8% strongly disagreed. 5.2% were uncertain.

Approve if someone begins killing criminals in my community by sex - URBAN

			SEX		
			Male	Female	Total
approve if someone begins killing criminals in my community	strongly agree	Count	61	47	108
		% within approve if someone begins killing criminals in my community	56.5%	43.5%	100.0%
		% within SEX	25.6%	16.8%	20.9%
		% of Total	11.8%	9.1%	20.9%
	agree	Count	76	85	161
		% within approve if someone begins killing criminals in my community	47.2%	52.8%	100.0%
		% within SEX	31.9%	30.5%	31.1%
		% of Total	14.7%	16.4%	31.1%
	uncertain	Count	17	28	45
		% within approve if someone begins killing criminals in my community	37.8%	62.2%	100.0%
		% within SEX	7.1%	10.0%	8.7%
		% of Total	3.3%	5.4%	8.7%
	disagree	Count	80	116	196
		% within approve if someone begins killing criminals in my community	40.8%	59.2%	100.0%
		% within SEX	33.6%	41.6%	37.9%
		% of Total	15.5%	22.4%	37.9%
	strongly disagree	Count	4	3	7
		% within approve if someone begins killing criminals in my community	57.1%	42.9%	100.0%
		% within SEX	1.7%	1.1%	1.4%
		% of Total	.8%	.6%	1.4%
Total		Count	238	279	517
		% within approve if someone begins killing criminals in my community	46.0%	54.0%	100.0%
		% within SEX	100.0%	100.0%	100.0%
		% of Total	46.0%	54.0%	100.0%

Attitude towards capital punishment for certain crimes

URBAN: 32.4 % of respondents agreed to the continuation of capital punishment for certain crimes. 21.9 % strongly agreed while 12.6 % were uncertain.
RURAL: 47.1 % disagreed to the continuation of capital punishment for certain crimes while 25.5 % agreed. 7.2 % were undecided.

Approve of capital punishment for certain crimes by sex - URBAN

			Sex		
			Male	Female	Total
Approve of capital punishment for certain crimes	strongly agree	Count	60	53	113
		% within Approve of capital punishment for certain crimes	53.1%	46.9%	100.0%
		% within Sex	25.2%	19.1%	21.9%
		% of Total	11.6%	10.3%	21.9%
	agree	Count	83	84	167
		% within Approve of capital punishment for certain crimes	49.7%	50.3%	100.0%
		% within Sex	34.9%	30.2%	32.4%
		% of Total	16.1%	16.3%	32.4%
	uncertain	Count	24	41	65
		% within Approve of capital punishment for certain crimes	36.9%	63.1%	100.0%
		% within Sex	10.1%	14.7%	12.6%
		% of Total	4.7%	7.9%	12.6%
	disagree	Count	65	92	157
		% within Approve of capital punishment for certain crimes	41.4%	58.6%	100.0%
		% within Sex	27.3%	33.1%	30.4%
		% of Total	12.6%	17.8%	30.4%
	strongly disagree	Count	6	8	14
		% within Approve of capital punishment for certain crimes	42.9%	57.1%	100.0%
		% within Sex	2.5%	2.9%	2.7%
		% of Total	1.2%	1.6%	2.7%
Total		Count	238	278	516
		% within Approve of capital punishment for certain crimes	46.1%	53.9%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	46.1%	53.9%	100.0%

Approve of capital punishment for certain crimes by sex - RURAL

			Sex		
			Male	Female	Total
Approve of capital punishment for certain crimes	strongly agree	Count	46	24	70
		% within Approve of capital punishment for certain crimes	65.7%	34.3%	100.0%
		% within Sex	19.4%	9.1%	14.0%
		% of Total	9.2%	4.8%	14.0%
	agree	Count	75	53	128
		% within Approve of capital punishment for certain crimes	58.6%	41.4%	100.0%
		% within Sex	31.6%	20.1%	25.5%
		% of Total	15.0%	10.6%	25.5%
	uncertain	Count	20	16	36
		% within Approve of capital punishment for certain crimes	55.6%	44.4%	100.0%
		% within Sex	8.4%	6.1%	7.2%
		% of Total	4.0%	3.2%	7.2%
	disagree	Count	83	153	236
		% within Approve of capital punishment for certain crimes	35.2%	64.8%	100.0%
		% within Sex	35.0%	58.0%	47.1%
		% of Total	16.6%	30.5%	47.1%
	strongly disagree	Count	13	18	31
		% within Approve of capital punishment for certain crimes	41.9%	58.1%	100.0%
		% within Sex	5.5%	6.8%	6.2%
		% of Total	2.6%	3.6%	6.2%
Total		Count	237	264	501
		% within Approve of capital punishment for certain crimes	47.3%	52.7%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	47.3%	52.7%	100.0%

PHYSICAL MEASUREMENTS

Blood pressure

The percentage of hypertensives (Persons with B.P of systolic >= 140 and diastolic >=90 and on Treatment for Hypertension) in both the urban and rural areas is 34.8 %.
URBAN: 44.3% of respondents in the urban area were found to be hypertensive.
RURAL: 25.0 % of respondents in the rural area were found to be hypertensive.

Distribution of Blood Pressure (High Blood Pressure = SysBP >= 140; DiasBP >= 90; On Treatment)- Urban and Rural

	Blood Pressure					
	Systolic >= 140; Diastolic >= 90; On Treatment		Systolic <140; Diastolic < 90		Total	
	N	Percent	N	Percent	N	Percent
Respondents	354	34.8%	664	65.2%	1018	100.0%

Distribution of Persons with High Blood Pressure by Sex - Urban and Rural

		SEX		
		Male	Female	Total
Persons with Hypertension	Count	172	182	354
	% within Total of Hypertensives	48.6%	51.4%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	48.6%	51.4%	100.0%
Total	Count	172	182	354
	% within Total of Hypertensives	48.6%	51.4%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	48.6%	51.4%	100.0%

Distribution of Blood Pressure (High Blood Pressure = SysBP >= 140; DiasBP >= 90; On Treatment)- Urban

	Blood Pressure					
	Systolic >= 140; Diastolic >= 90; On Treatment		Systolic <140; Diastolic < 90		Total	
	N	Percent	N	Percent	N	Percent
Respondents	229	44.3%	288	55.7%	517	100.0%

Distribution of Persons with High Blood Pressure by Sex - Urban

		SEX		
		Male	Female	Total
Persons with Hypertension	Count	108	121	229
	% within Total of Hypertensives	47.2%	52.8%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	47.2%	52.8%	100.0%
Total	Count	108	121	229
	% within Total of Hypertensives	47.2%	52.8%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	47.2%	52.8%	100.0%

Distribution of Blood Pressure (High Blood Pressure = SysBP >= 140; DiasBP >= 90; On Treatment) - Rural

	Blood Pressure					
	Systolic >= 140; Diastolic >= 90; On Treatment		Systolic <140; Diastolic < 90		Total	
	N	Percent	N	Percent	N	Percent
Respondents	125	25.0%	376	75.0%	501	100.0%

Distribution of Persons with High Blood Pressure by Sex - Rural

		SEX		
		Male	Female	Total
Persons with Hypertension	Count	64	61	125
	% within Total of Hypertensives	51.2%	48.8%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	51.2%	48.8%	100.0%
Total	Count	64	61	125
	% within Total of Hypertensives	51.2%	48.8%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	51.2%	48.8%	100.0%

Body mass index

The body mass index was calculated with the formula [weight / (height M)**2]. A body mass index of less than 25 kg per meter sq are considered - normal weight, between 25 and 29 kg per meter sq - overweight, and 30 and above were considered - obese.

From the results, it appears that there were more females in the obese category than were males. In both urban and rural areas, the proportion of obese people was 10.9%.

URBAN: 13.9% of respondents in the urban area were in the obese category with 81.9% females and 18.1% males. Females between the ages of 35-44 had the highest proportion and those between the ages of 15-24 had the least proportion. In the overweight category, 25.7% were overweight with 59.4% females and 40.6% males.

RURAL: 7.8% of respondents in the rural area were in the obese category with 76.9% females and 23.1% males. Females between the ages of 25-34 had the highest

proportion and those between the ages of 55-64 had the least proportion. In the overweight category, 16% were overweight with 61.3% females and 38.8% males.

Obese persons - URBAN

	Cases					
	Obese		Non Obese		Total	
	N	Percent	N	Percent	N	Percent
Respondents	72	13.9%	445	86.1%	517	100.0%

Obese persons by sex - URBAN

		SEX		
		Male	Female	Total
Obese	Count	13	59	72
	% within Obese	18.1%	81.9%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	18.1%	81.9%	100.0%
Total	Count	13	59	72
	% within Obese	18.1%	81.9%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	18.1%	81.9%	100.0%

Obese persons - RURAL

	Cases					
	Obese		Non Obese		Total	
	N	Percent	N	Percent	N	Percent
Respondents	39	7.8%	462	92.2%	501	100.0%

Obese persons by sex - RURAL

		SEX		
		Male	Female	Total
Obese	Count	9	30	39
	% within Obese	23.1%	76.9%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	23.1%	76.9%	100.0%
Total	Count	9	30	39
	% within Obese	23.1%	76.9%	100.0%
	% within SEX	100.0%	100.0%	100.0%
	% of Total	23.1%	76.9%	100.0%

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SAMPLE

INCLUSION/EXCLUSION CRITERIA

A three stage stratified cluster sampling technique was used. The first sampling consisted of a list of the states of the Federation. The second consisted of a list of the Local Government Areas in the selected states. The third stage consisted of a list of the communities in the selected Local Government Areas. Urban and rural populations consisting of people living in stable residential community were selected from the Local Government Areas. Within the communities, households within housing units were surveyed. The Spinning bottle method was used to select the first household. Inclusion criteria for respondents were age above 15 years and consent to interview.

TRAINING

Interviewer Profile: A multidisciplinary approach was adopted in selection of interviewers. They were to come from a science background.

There were 12 females and 8 males in the field team. Their age distribution was as follows:

15 – 24 years --------- 2 persons

25 – 34 years --------- 9 persons

35 – 44 years --------- 3 persons

45 – 54 years --------- 6 persons

TOTAL 20 Persons

There were 3 medical doctors, 2 nurses, 4 Laboratory scientists, 2 Data collection personnel, a microbiology major, and 4 field staff from the University of Lagos Teaching hospital, and 4 community health workers in the Local Government councils.

Training content: training lasted between 9 am and 6 pm with 1 hour break for lunch. Topics covered included:

1. Objectives of Survey
2. Study design and duties of data collection team
3. Key issues in conducting house-hold interviews

4. Data collection Protocols for physical and biochemical measurements
5. Consideration of Questionnaire
6. Practical session on completing the questionnaire
7. Group discussion.

Survey materials used include

1. 26 page questionnaire
2. Standard meter rule
3. Hansons weighing scale
4. Accosons sphygmomanometer
5. Note pads and stationery

The interviews were carried out in Yoruba language, Pigeon English and English language after few clarifications were discussed during the training session.

DATA COLLECTION

The **response rate** from the communities visited was quite high. There was enthusiasm shown by respondents and they often went out of their way to seek out the interviewers. This probably could have been attributed to incentives and proper explanations given to them about the objectives of the study.

Incentives given was in the form of routine drugs handed out free of charge and the fact that their blood pressures, weight, Fasting blood sugars were done free of charge.

Organization of fieldwork was done by creating two groups of 10 interviewers, randomly selected to visit either the urban or the rural area. There was a team leader who was a medical doctor and who was in charge of coordinating the activities of the group. They would usually arrange transportation, supervised interviews and physical measurements, collate all the questionnaires filled for the day and crosschecked them after the days job. Any clarifications were corrected either immediately or before the start of the next day's interviews. Verification checks were also the responsibility of the field team leaders and were conducted on a continuous basis while in a

particular community. Each interviewer completed an average of 5 questionnaires per day starting around 9 am every morning until evening.

QUESTIONNAIRE ADMINISTRATION

Informed consent was done orally after careful explanation of the objectives of the study and requirements. No formal letter of consent was gotten. Any body that declined was left alone with out any form of convincing. This was to minimize any form of bias.

Privacy was almost impossible to achieve as most times family members and friends close by, would want to listen into questions being posed.

Interviews lasted on average of 1 hour per interviewee.

Problematic questions or sections were mostly in the Man/Woman sections of the survey instrument. Most were embarrassed when personal questions on sexuality was posed to them. Age was another problematic part as most people, especially women, were seen to show some reservation in telling their ages.

Cooperation generally was encouraging as most people were egger to be interviewed. Questions were markedly understood easily following careful presentation and explanation by the interviewer but with occasionally difficulties with the elderly group and they most of the time required family members to explain questions despite being asked in their native tongue.

Interview issues include:

1. A number of people declined continuing after spending about 5 minutes and checking out how many more pages they had to go through.
2. Some men would not allow their wives to be interviewed.
3. Some respondents refused to cooperate when it was explained that blood samples would be required for biochemical measurements.

DATA MANAGEMENT

Storage of completed questionnaire was in at the Nigerian heart foundation. At the end of every day, after clarifications were done, the team leaders collected all questionnaires for the day and stored them at office of the

Nigerian heart foundation and the Lagos University Teaching Hospital, Lagos. The questionnaires were stored in private offices out of reach of unauthorized personnel in order to maintain confidentiality.

Data entry commenced immediately after data collection by experienced staff from the Federal office of Statistics. Data entry commenced with manual coding of the 1018 questionnaires. Software development ran concurrently with manual coding after which the data was captured and edited to assure for quality and reliable data, using EPI info software. This was later translated to SARS and SPSS for analysis.

LESSONS LEARNED

This effort has given us the opportunity to realize the need to promote collaborations between NGOs and the Federal Ministry of Health, in health promotion programs. To mention a few lessons learned:

i. Mobilization/Incentives to interviewees was a very important aspect of data collection. It was noticed that persons were more willing to be interviewed and were more relaxed if they knew there was some form of reward coming to them.

ii. Proper planning and adequate timing was very important to allow for accurate data collection.

iii. Questions in the Questionnaire were quite many resulting in so much time for completion. This was usually discouraging to respondents. Quite a number of persons on realizing the length of the questionnaire declined participating in the survey.

iv. The importance of pilot projects cannot be overemphasized in studies like this for precise and accurate project execution.

Future surveillance surveys, it is hoped, would continue in other States to give a general picture of the true health behavior of the Nigerian adult population.

PLANS FOR USE OF DATA AND FURTHER EXPANSION OF SURVEILLANCE ACTIVITIES.

At the commencement of the study, a workshop was organized to intimate the stakeholders on the projects aims and objectives. There shall be collaboration with the following identified stakeholders for data use:

The Federal Ministries of health, Nigerian Institute of Medical Research, National Agency for Food and Drug administration, National Primary Health Care Development Agency, Nigerian Hypertension Society, Nigerian Heart Foundation, Nigerian Diabetic Association, Nigerian Cancer Society, Nigerian Nutrition Society, Nigerian Medical Association, Nigerian Guild of Medical Directors, Association of General Medical Practitioners of Nigeria, National Universities commission, National Postgraduate medical College, WHO Nigeria, WHO AFRO Harare.

There would be a stakeholders meeting after the report has been appraised and approved, to present the results. It is hoped this project would serve as a base line for National Health behavioral surveillance every two years.

The Federal Ministry of Health (NCD unit), the State Ministries of Health (NCD unit), Federal Primary Health care Development Agency and State Primary Health care Development Agencies and NGOs would be brought together to reach a consensus on data use. The consensus would encourage getting the data into functional public health and health promotion programs.