

EAT WELL LIVE WELL

FREE HEALTH

SCREENING REPORT

1st JULY, 2010

VENUE; FORECOURT

OF CHOICE FM

INTRODUCTION

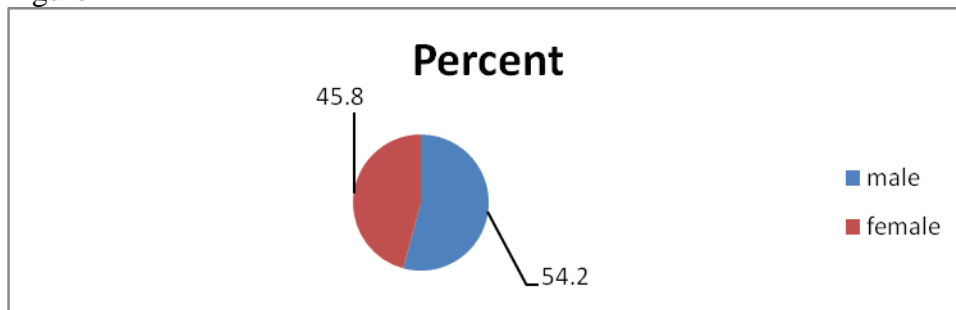
The second “EAT WELL LIVE WELL” free medical screening and public education took place on the forecourt of Choice FM on the 1st of July 2010. This campaign is one of the outreach efforts of the Food Gallery team. Food Gallery is an hour long programme held every Saturday from 7 to 8am on Choice FM. Various diet, wellbeing and lifestyle topics are discussed with a team of resident dietitians and nutritionists and expert guests are invited on specific topics.

The campaign seeks to further educate people on healthy eating and living and consequences of not doing so. It also seeks to allow people to know their health statistics ie weight, height, BMI, blood pressure and sugar levels. This year we had a team of dentists on board and even some barbers were available to give haircuts. Dietitians and nutritionists were on hand to counsel people based on the tests and people with elevated values were referred to the hospital. All these services were provided for free.

DATA

A total of 365 people were documented to have benefited from the programme. This excluded many children whose data was not recorded due to pressure. Of the participants, 54.2% were male and 45.8% were female (figure 1).

Figure 1



The average age of participants was 33.22 years and the ages ranged from 4 years to 77 years. The males had a higher average age of 36.4 yrs as compared to the females with an average age of 29.5 yrs (Table 2). When the ages of the participants was categorized, those aged between 18-29 yrs were 27.1% of the participants followed by those between 30 and 40 yrs (figure 2).

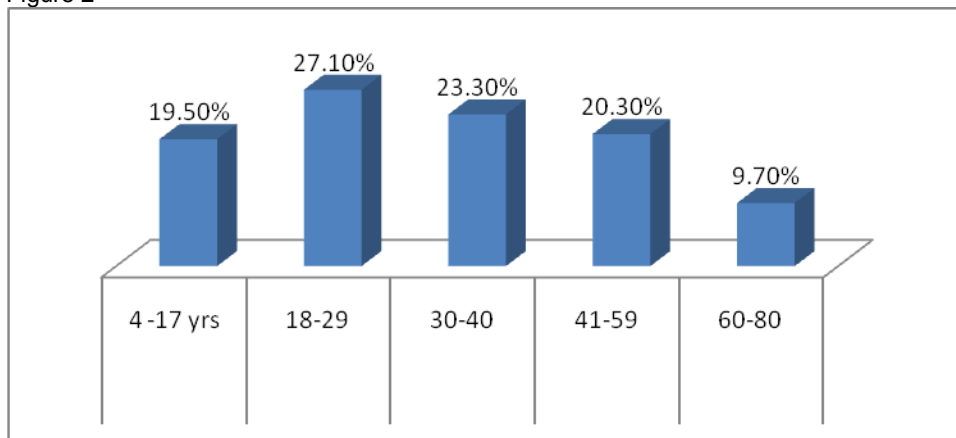
Table 1; Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
AGE	4	77	33.22	17.687
SYSTOLIC	96	200	126.42	17.962
diastolic	50	100	75.19	10.878
WEIGHT	43.7	119.6	68.788	13.7736
HEIGHT	1.14	1.88	1.6706	.08890
BMI	16.57	48.94	24.7377	5.21948
SUGAR	3.2	13.5	5.313	1.2881

Table 2

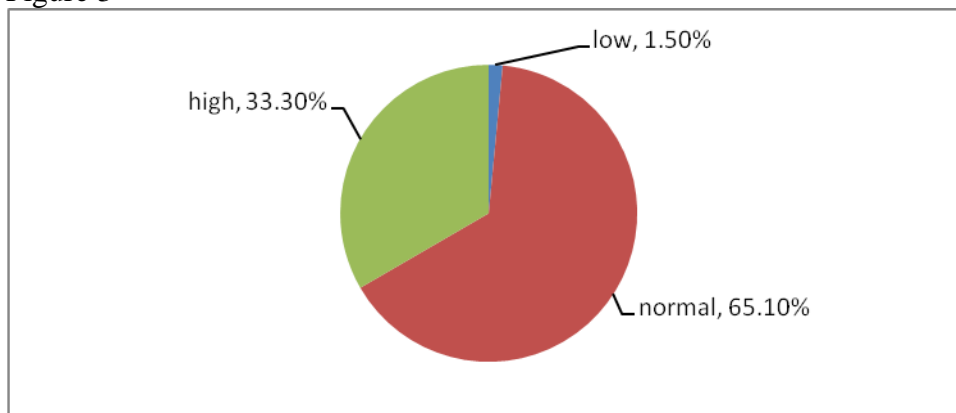
SEX	Mean	Std. Deviation
male	36.36	16.815
female	29.51	18.048

Figure 2



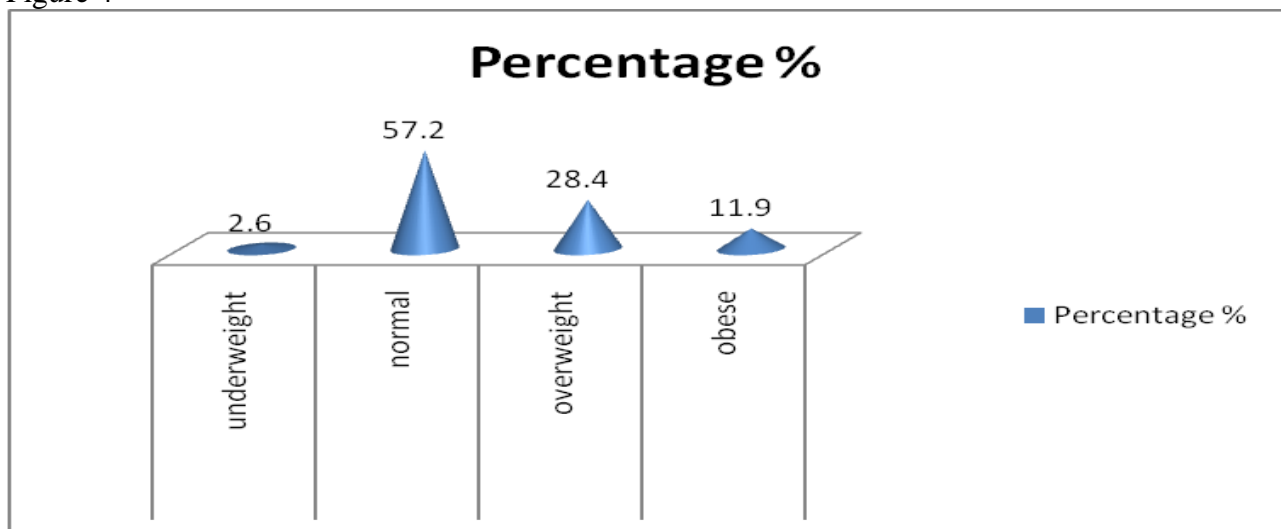
The mean systolic and diastolic pressures were 126.42 and 75.19 respectively (table 1). 65.1% of the participants had normal blood pressure with **33.3%** of them having elevated blood pressure. This is worrying and those 33.3% were advised to visit the nearest hospital (figure 3).

Figure 3



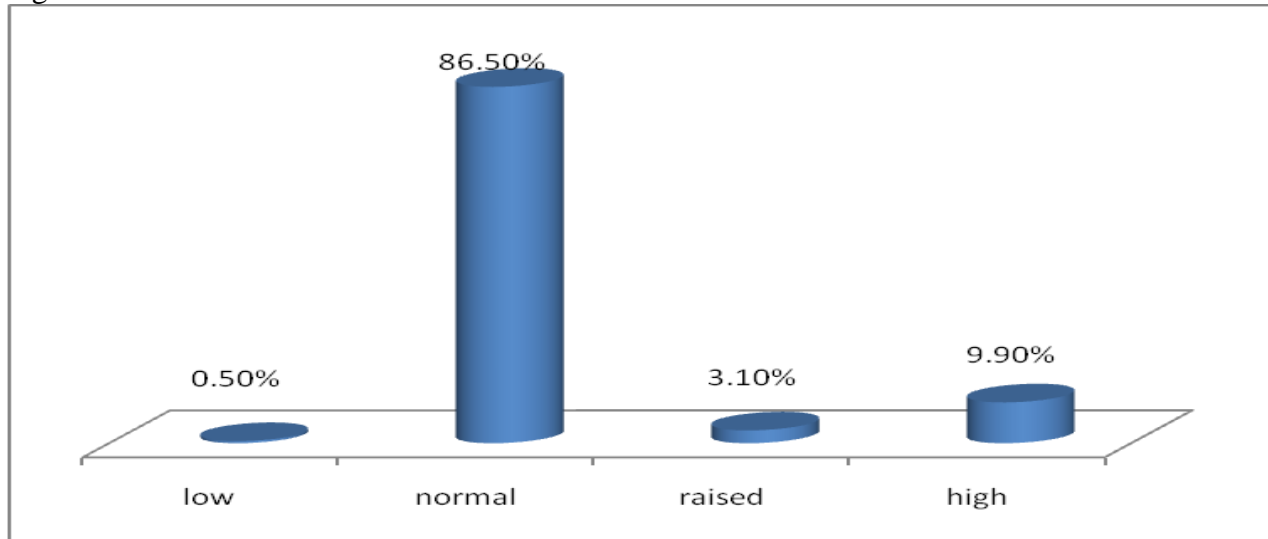
The average weight of the participants was 68.8 kg and a maximum weight of 119.6 kg (table 1). The average body mass index (BMI) of the participants was 24.74 kg/m² which was normal. Just over half (57.2%) had normal BMI with 40.3% of them being overweight and obese (figure 4).

Figure 4



The fasting blood sugar recorded ranged from 3.2 mmol/L to 13.5 mmol/L. An average sugar level of 5.3 mmol/L was recorded (table 1). A majority of the participants (86.5%) had normal sugar levels with 9.9% of the people having high fasting sugar levels (> 6.4 mmol/L). 3.1% of the people had raised fasting sugar levels (6-6.4 mmol/L) and were counseled to take measures to control it (Figure 5).

Figure 5



CROSS-TABULATION ANALYSIS

Cross-tabulating the categorized ages with the blood pressure revealed a statistically significant relationship ($p= 0.004$) with an increase in age and increase in blood pressure (table 3). Participants between 41-59 yrs had the highest number of high blood pressure (22) (table 3).

Table 3 age recoded * bp recoded Crosstabulation

		bp recoded		
		low	normal	high
age recoded	4-17	0	7	0
	18-29	1	47	14
	30-40	1	40	14
	41-59	1	25	22
	60-80	0	8	15
		Pearson chi-square	df=8	sig= 0.004

Among the sexes, more male had normal and high blood pressures as compared to their female counterparts though the differences observed were not statistically significant (table 4).

Table 4

		bp recoded		
		low	normal	high
SEX	Male	2	69	44
	female	1	58	21

There was a statistically significant relationship between the sex of participants and their BMI. More men were overweight than women but more women were obese (Table 5).

Table 5

		BMIRECOD				Total
		underweight	normal	overweight	obese	
SEX	Male	2	74	31	7	114
	female	3	37	24	16	80
		Pearson Chi-Square		df=3	Sig= 0.010	

Though more men had raised and high sugar levels than the women, the differences observed were not statistically significant (table 6).

Table 6

			sugar recoded				Total
			low	normal	raised	high	
SEX	Male	Count	0	98	4	12	114
	Female	Count	1	68	2	7	78

INDEPENDENT SAMPLE T-TEST

The male participants in the study had a greater average systolic blood pressure, diastolic blood pressure and weight when compared to their female compatriots though the observed differences were statistically insignificant (table 7). However, the higher average height (1.71 m) and sugar level (5.454 mmol/L) of male participants over the females were statistically significant ($p=0.000$). The women participants had a significantly higher BMI (26.4 kg/m^2) than the men (23.5 kg/m^2) (table 7).

Table 7

	SEX	Mean	Std. Deviation	Sig	
SYSTOLIC	Male	127.93	17.971		
	Female	124.24	17.835		
diastolic	Male	75.63	10.482		
	Female	74.56	11.461		
WEIGHT	Male	68.984	11.5644		
	Female	68.509	16.5049		
HEIGHT	Male	1.7116	.06790		0.000
	Female	1.6119	.08245		
BMI	Male	23.5181	3.53409	0.000	
	Female	26.4844	6.59889		
SUGAR	Male	5.454	1.4916	0.000	
	Female	5.108	.8826		

CORRELATION ANALYSIS

Table 8 shows correlation analysis for the continuous variables measured during the campaign. The positive correlation between age and systolic BP, diastolic BP, weight, BMI and fasting sugar means that those parameters increased with increase in age or participants (table 8). Systolic blood pressure was also positively correlated with age, diastolic BP, weight, BMI and fasting sugar. An increase in diastolic BP was accompanied by an increase in age, systolic BP, weight, BMI and sugar levels. Increase in diastolic BP was however accompanied by a decrease in height of participants (table 8).

Weight positively correlated with age, systolic BP, diastolic BP, height and BMI. Height of participants positively correlated with weight but negatively correlated with diastolic BP and BMI. BMI negatively correlated with height but positively correlated with age, systolic BP, diastolic BP and weight. Raise in fasting sugar levels was accompanied by a positive increase in age, systolic BP and diastolic BP.

Table 8

		AGE	SYSTOLIC	diastolic	WEIGHT	HEIGHT	BMI	SUGAR
AGE	Pearson Correlation	1	.426(**)	.368(**)	.215(**)	-.074	.243(**)	.231(**)
	Sig. (2-tailed)	.	.000	.000	.002	.302	.001	.001
SYSTOLIC	Pearson Correlation	.426(**)	1	.738(**)	.166(*)	-.058	.197(**)	.197(**)
	Sig. (2-tailed)	.000	.	.000	.020	.421	.006	.006
diastolic	Pearson Correlation	.368(**)	.738(**)	1	.242(**)	-.157(*)	.325(**)	.181(*)
	Sig. (2-tailed)	.000	.000	.	.001	.028	.000	.012
WEIGHT	Pearson Correlation	.215(**)	.166(*)	.242(**)	1	.267(**)	.820(**)	.076
	Sig. (2-tailed)	.002	.020	.001	.	.000	.000	.296
HEIGHT	Pearson Correlation	-.074	-.058	-.157(*)	.267(**)	1	-.313(**)	-.032
	Sig. (2-tailed)	.302	.421	.028	.000	.	.000	.664
BMI	Pearson Correlation	.243(**)	.197(**)	.325(**)	.820(**)	-.313(**)	1	.081
	Sig. (2-tailed)	.001	.006	.000	.000	.000	.	.261
SUGAR	Pearson Correlation	.231(**)	.197(**)	.181(*)	.076	-.032	.081	1
	Sig. (2-tailed)	.001	.006	.012	.296	.664	.261	.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

DENTAL SUMMARY

- Approximately 80% of participants had varying levels of calculi.
- Almost 40% also had some missing teeth
- 5-7% had serious dental problems and had seen the dentist.
- All the other participants with dental problems had not visited a dentist before and were advised to do so.

CONCLUSIONS

- At least 365 people benefited from the free health screening and counseling.
- 54.2% of participants were male and 45.8% were female.
- The average age of participants was 33.2 years and the ages of participants ranged from 4 years to 77 years.
- The men had a higher average age of 36.4 yrs as compared to the women with an

average age of 29.5 yrs.

- 65.1% of the participants had normal blood pressure with **33.3%** of them having raised blood pressure.
- The average body mass index (BMI) of the participants was 24.74 kg/m².
- 57.2% of participants had normal BMI with 40.3% of them being overweight and obese.
- More men were overweight than women but more women were obese.
- A majority of the participants (86.5%) had normal sugar levels with 9.9% of the people having high fasting sugar levels (> 6.4 mmol/L).
- The higher average height (1.71 m) and sugar level (5.454 mmol/L) of male participants over the females were statistically significant (p=0.000).
- The women participants had a significantly higher BMI (26.4 kg/m²) than the men (23.5 kg/m²).

RECOMMENDATIONS

- Due to inadequate sponsorship, there was inadequate supply of medical consumables especially glucose strips. This was because of the higher than expected patronage.
- Efforts would be made to include other tests for participants next year such as HIV, cholesterol and hepatitis B.
- **Many participants who listen to the educative food gallery programme on choice fm pleaded with us to take the programme to a Twi speaking radio station so those who are challenged by the English language would benefit from the message of regenerative health and nutrition.**

TEAM MEMBERS

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SPONSORSHIP

REGENERATIVE HEALTH AND NUTRITION UNIT, MIN. OF HEALTH
VOLTIC GHANA
HEALTHILIFE BEVERAGES
F&S CONSULT
DANNY'S DECORATIONS
FINEST HAIRCUT, ABELEMPKE