ASSESSMENT OF WEIGHT LOSS PROGRAMMES IN THE KUMASI METROPOLIS

By

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DECLARATION

I hereby declare that this submission is my own work towards the Masters of Business Administration and that, to the best of my knowledge, it contains no material previously published by another person or material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

This work is dedicated to my family: my husband Eric Afriyie-Adjimi and our children Amanda, Richard and David. It is your immense support that has made this possible.

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ABSTRACT

Weight loss markets have grown rapidly and have given rise to opportunities for weight loss consultants due to a high level of public awareness and the growing rates of obesity. There are different interventions now realised with weight loss industries today. They may be fitness centres or weight loss consultants or companies who attend to their clients by the introduction of supplements and other health foods. The study sought to assess the weight loss programmes in the Kumasi metropolis. The assessment was limited to the level of public awareness of the weight loss programmes in the Kumasi metropolis and the various interventions in the industry leading to healthy weight loss. The study also sought to identify challenges with weight loss programmes in Kumasi. The convenience sampling technique was used. The study was designed to collect data from 204 registered members but the findings presented were based on 155 respondents from the selected fitness centres and weight loss firms. The majority had a fair knowledge about the gym, weight loss companies, dieting, and some other weight loss programmes. It was realised that certain factors such as motivation, improvement in weight status, and other benefits from the programme such as optimal health and youthfulness, highly influenced one's participation in a particular programme. It was also realised that pricing and programme packaging also influenced the level of patronage. Though all the programmes result in some weight loss especially within the first three months, the gym seemed to have caught the attention of the masses due to its exceeding benefits.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The term „overweight" is defined as an abnormal or excessive accumulation of fat that will impair health. World Health Organisation (WHO) data has it that in 2014, adults who were 18 years and above and were overweight numbered over 1.9 billion. Of these over 600 million adults were obese. Overall, about 13% of the world"s adult population (11% of men and 15% of women) were obese in 2014. In 2014, 39% of adults aged 18 years and over (38% of men and 40% of women) were overweight.

The prevalence of worldwide obesity more than doubled between 1980 and 2014 (WHO, 2016).

The prevalence of obesity is increasing in all ages worldwide. In this 21st century, obesity has become one of the main issues within the health sector among nations. This rise has increased the range of opportunities to develop weight loss services with the aim of helping clients lose weight and keep fit (Mason, 2011). In 2006 the UK reported the prevalence of obesity to be 24% among women and 23% among men. Recent studies have shown that in the US the prevalence of obesity over the last decade has increased. The rate which was previously 12% is now 19.8% and half of the adults are obese or overweight. However, according to Mason (2011), it is no longer a disease of industrialized countries but exists in developing countries as well.

In West Africa, obesity prevalence of 10% has been reported and specifically 18% in the Republic of Benin. In Ghana, it has been rising steadily from as low as 0.9% in the

1980s to about 14% in 2003 and it is more common among women than men (Amoah, 2003). Based on the female obesity prevalence in 2008 (9.3%), Ghana is

th rated 100 out of 142 countries in the percentage global prevalence of adult obesity country ranking, with the highest in Accra (Dake et al, 2011). In Kumasi, Ghana, reports have it that the prevalence of obesity is 27.9% among sedentary workers. The high prevalence of overweight and obesity is reported to be a major contribution to the increased level of Non-Communicable Diseases (NCDs) in Ghana. It has been reported that 80% of premature deaths from NCDs can be prevented through known dietary and lifestyle interventions. A recent survey indicates that 18% of Ghanaians have been diagnosed with at least one NCD, with 45% of this number receiving dietary and lifestyle interventions (Uwadia, 2013).

Several factors have contributed to the current situation, including urbanization, nutritional transition, genetics, sedentary lifestyle, disease and disorders, life events such as pregnancy and menopause. Even in some African countries including Ghana, fitness has been associated with wealth, prosperity, affluence and happiness (Mogre et al., 2013). Obesity is associated with some health risks. These include cardiovascular diseases, depression, hypertension, breathlessness, diabetes, and general weakness, osteoarthritis and certain cancers such as breast and colon. As a result of these health effects, obesity is now the fifth leading risk for deaths worldwide with at least 2.8 million adults dying on an annual basis (Mason, 2011).

Weight loss markets have grown rapidly and have given rise to opportunities for weight loss consultants due to a high level of public awareness and the growing rates of obesity. There are different interventions now realised with weight loss industries today. They can be broadly classified as clinical and non-clinical. The non-clinical approach is

usually commercially operated. They may be weight loss consultants or companies who attend to their clients by the introduction of supplements and other health foods. The fitness centres also fall in this category.

The do-it-yourself approach can also fall under this category where individuals try to lose weight by themselves and rely on diet books or go along with support groups. Clinical weight loss includes prescription by a doctor or health practitioner. Drugs and supplements are prescribed for weight loss. Drugs prescribed for weight loss can be either appetite suppressants or lipase inhibitors. Surgery, on the other hand, is also considered after patients have tried to lose weight through all other means. Some of the clinical intervention includes liposuction, and bariatric surgeries (Shekelle et al., 2004).

1.2 Problem Statement

Obesity is not just a major health concern globally but also a real epidemic and issue for many countries. The concern of a lot of health practitioners now is to reduce the alarming rate of obesity. These days, children are obese, grownups are obese and there seems to be a dramatic rise. Busy schedules of workers make it quite difficult to inculcate exercise into daily schedules; parents are in a hurry to dash off to work or attend to other things and have resorted to junk foods and fast foods. Choosing healthy meals is not a priority anymore and this has increased the rate of obesity worldwide. Some studies have looked at the rural-urban perspective where obesity has been found to be much higher in urban areas. Other factors linked with obesity and weight loss in Ghana still remain under-researched. The emerging trend of weight loss programmes is on the rise and there has been the need to find out more about these programmes, how

they are doing and how people have been impacted. A lot of individuals and organisations are now giving attention to obesity and trying to minimize the rate of its rising. There are fitness centres, health shops, pharmaceutical shops, and companies like Forever Living and Herbalife who all have common goals to reduce obesity and optimize health. These companies through various strategies market their products and services. This study will also look at how they can effectively do this to increase their performance and customer satisfaction.

1.3 Objectives

The main objective of this research was to assess weight loss programmes in the Kumasi metropolis. Kumasi is one of the regional capitals in Ghana and this trend of weight management seems to have caught up so well in the city, and hence the need to focus there. The under-listed objectives were formulated based on the general objectives.

1. To assess the level of public awareness of the weight loss programmes in Kumasi.
2. To identify the various interventions leading to healthy weight loss.
3. To identify challenges with weight loss programmes.

1.4 Research Questions

In order to achieve the above objectives, the following questions were asked: 1. Is the public aware of weight loss programmes in Kumasi?

2. What are the intervention programmes leading to healthy weight loss?
3. Are there any challenges associated with weight loss programmes?

1.5 Significance of Study

The concept of weight loss is a relatively new phenomenon in Ghana; hence findings from the study would serve as reference material for weight loss consultants, students

and healthcare professionals such as nurses and doctors. This study as an academic exercise will contribute to intellectual knowledge on the types of weight loss programmes available and their effectiveness. It will also facilitate understanding of the causes and effects of weight gain through awareness creation and make people conscious of these issues. Also, the research seeks to provide various strategies that will help both the individual and the weight loss companies to improve overall performance. The institutions and firms rendering weight loss services should be interested in the recommendations and measures to best improve upon the

implementation of their services. Furthermore, it will assist health care practitioners in their bid to combat this epidemic and to improve upon the operations of these services within the metropolis and nation as a whole. It will also make the general public know which programmes are well suited for them. The findings should also generate debate among students and academia and generate interest for further research into weight management.

1.6 Scope of Study

The study was limited to selected fitness centres and weight loss firms operating in Kumasi. It sought to assess the awareness of respondents on weight loss programmes, the various interventions, and their effects.

1.7 Overview of Methodology

This study sought to assess weight loss programmes in the Kumasi metropolis. This is a quantitative research. Quantitative research uses questionnaires for primary data collection. The data usually consists of numbers rather than words and may be analyzed mathematically or through computer programmes (Castellan, 2010). The sources of data were mainly primary. Primary data consists of a collection of original information

by the researcher. The researcher in order to undertake primary data has to gain insight into the issue by analyzing and reviewing information collected previously, also known as the secondary data. The instruments used were questionnaires. The sample size was 204 people from selected fitness centres and weight loss firms within the population.

The convenience sampling technique was used in this research. The convenience sampling technique enabled the researcher to select respondents she could easily obtain to participate in the study. Results were processed and analysed with a software package (SPSS) and based on the results and interpretation, recommendations and conclusions were given.

1.8 Organization of the Study

Chapter One covers the general introduction, background of the study, and problem statement. Additionally, it comprises of the general and specific objectives, research questions, significance, scope and limitations of the study. Chapter Two reviews related literature. Issues considered here include types of weight loss interventions, strategies used in marketing these services, the causes of obesity, the related health risks and a summary of the related literature. Chapter Three shows the methods used to carry out the study. Areas considered include the study area, the study population, the research design, sample and sampling procedure or techniques, administration of questionnaires and interviews and data collection. The data analysis is presented in Chapter Four, and Chapter Five deals with the summary, conclusions and recommendations made in the light of the findings of the study.

1.9 Limitations of the Study

The study faced some challenges which the researcher carefully managed. Retrieving of questionnaires from many respondents was a challenge as it was difficult reaching many of them. There were also some inconsistencies in the feedback some respondents gave. The reluctance of some fitness centres and weight loss firms in sharing their membership details was also a challenge. Time was also a crucial factor in covering the wide study area.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of the literature on the subject matter of the study. Various terms and concepts on weight management are presented. The chapter explores the various empirical works on weight loss programmes. It presents varying arguments on the relevant aspects of the subject matter. It looks at the causes and effects of being overweight and the effective management of weight programmes. It also looks at the strategies employed in marketing weight loss programmes and finally presents a conceptualization of the study in a framework vis-à-vis, the variables useful to the study.

2.1 Meaning and Definition of Key Concepts and Terms

According to the American Dietetic Association (2009), weight loss is a decrease in body weight resulting from either a voluntary method which is by diet or exercise, or involuntary means through illness. The US Centres for Diseases Control and Prevention say it is a lifestyle that includes making long-term changes in exercise and eating habits daily (Seagle et al., 2009). The World Health Organisation also defines the terms

„overweight“ and „obese“ most simply as an abnormal or excessive accumulation of fat that will impair health, whereas Rosen and Spiegelman say it is an excess accumulation of white adipose tissue due to an imbalance between energy intake and expenditure (Barres et al., 2013).

In order to determine the risk to an individual being obese or overweight, the BMI is the tool used. It is the ratio of weight to height of an individual and it is calculated by dividing a person“s weight by the square of their height. The obtained value is used alongside charts to find out a person“s relative health risk. World Health Authority defines a person with BMI between 25 and 29 as overweight and above 30 as obese. An individual with a BMI less than 18.50 is underweight and between 18.99 - 24.99 is normal. Another parameter used in determining overweight and obesity is the waist to hip ratio. For men, it should be less than 1.0 and for women, less than 0.8 (Anduful, 2005). For the purpose of this research, I would say a decrease in accumulated body fat of a person who has a BMI of 25 and above would be termed weight loss. Obesity and overweight is a state of having an abnormal or excessive accumulation of fat that will impair health.

The act of judging or deciding the amount, value, quality, or importance of something, or the judgment or decision that is made the act of judging or deciding the amount, value, quality, or importance of something, or the judgment or decision that is made the act of judging or deciding the amount, value, quality, or importance of something, or the judgment or decision that is made Weight loss is a decrease in body weight resulting from either voluntary (diet, exercise) or involuntary (illness) circumstances.

Weight-loss intervention programmes are programs put together to curb or eliminate weight gain. These could be clinical or non-clinical.

2.2 Strategies Adopted By Weight Loss Companies in Marketing Products and Services

Businesses adopt various strategies to help them in survival, growth and improvement of overall performance. According to Agyapong (2012), strategy includes understanding the strategic position of an organisation, strategic choices for the future and turning strategy into action. As stated by Porter (1980), having a business strategy should be the primary function of any firm that wants to survive and grow in the turbulent business environment. The weight loss business is becoming an increasingly growing market in developing countries like Ghana. This is because people are becoming more conscious about their health, taking into account the risk and benefits associated. As a result of the increasing growth in this sector, businesses need to adopt various strategies in order to appeal to these market needs.

Firstly, this market needs to adopt pricing strategy of low cost. The price sensitivity nature of the people needs to be taken into account in order to increase their market share, improve performance and boost overall revenue. Products and services focusing on a price sensitive market must seek to provide a standard, no-frills, products and services at cheapest prices to customers (Acquaah & Agyapong 2015). Porter (1985), suggested that cost leadership firms need to control costs tightly, refrain from incurring too many expenses from innovation or marketing, engage in value chain activities lower than competitors and cut prices when selling their products. A success in the implementation of cost leadership generates benefits in terms of process engineering

skills, ease of product manufacturing, and cost controlled. Firms that implement low-cost strategy in a price sensitive market win a large part of the market thereby boosting their performance.

Weight loss programs have varying costs depending on the frequency of participation by clients. Health shops and weight loss companies tend to be quite costly because supplements and drugs are quite expensive to maintain in the long run, however, those who are able to cut the price even slightly tend to increase their market share in a price sensitive area. Fitness centres may charge clients monthly or daily depending on the number of visits, giving clients the flexibility to choose what is affordable.

Products and services offered by weight loss programs include but not limited to the sale of food and nutritional supplements, instructions, and supervision for exercises and support systems including motivation and encouragement so clients reach their weight loss goals and obtain optimal health. In marketing these products and services in a competitive environment, there is the need to differentiate products. Product differentiation seeks to provide products or services that offer benefits different from those of competitors and that are widely valued by buyers (Johnson et al., 2007). The aim is to achieve competitive advantage by offering better products or services at the same price or enhancing margins by pricing slightly higher. It focuses on offering products or services with high quality and unique features. This gives the opportunity to be creative, innovative and distinct from competitors. The distinctiveness of the product or services can be in terms of the features, technology, customer service, design, brand image etc. As stated by Ting et al., (2012), innovation is unavoidable for firms that want to develop and maintain a competitive advantage and/or gain entry into

new markets. Drummond, Ensor and Ashford (2003) suggest that the common sources of differentiation will include:

1. Product performance – the product performance can enhance its perceived value from a customer‟s perspective.
2. Product perception – the perception of the product is often different from the performance
3. Product augmentation – the product can be extended and augmented in ways that will be of value to the customer.

Product differentiation considers design, technology, usefulness, value, convenience, quality, packaging, branding (Singh 2012). In order to grow your customers, there is the need to provide their desires in addition to what you believe they need. From the above discussions, it can be inferred that services offered by the fitness centres can be augmented by the adding of sales of some energy boosting supplements to enhance activity. The kind of ultra modern equipment used and the support systems in place may also differ per programme, encouraging loyalty of clients.

Multi-level marketing (MLM), is a business model in which product distributors are compensated for enrolling further distributors as well as for selling a product (Droney, 2016). It is common place for some weight loss companies to encourage the sale and utilization of products as this has a direct bearing on their income. Most of these weight loss companies adopt multi-level marketing strategy. Creativity and innovation can also be exhibited with good packages and attractive labels on food supplements and other products to attract their customers. Customers‟ interest may be whisked up by these

strategies which in the long run can increase sales and profitability and also bring about goodwill.

According to Gunasekharan et al., (2016) sales promotion is one of the key elements in the marketing mix for many consumer products worldwide that has been used in order to stimulate consumer purchases. This strategy looks at possible means and factors to penetrate and push products and services onto the market.

The promotion mix consists of four basic elements. These are:

1. Advertising: being the dissemination of information by non-personal means through paid media where the source is the sponsoring organization
2. Personal Selling: which is the dissemination of information by personal methods, like face-to-face, contacts between audience and employees of the sponsoring organization. The source of information is the sponsoring organization.
3. Sales Promotion: which is the dissemination of information through a wide variety of activities other than personal selling, advertising and publicity which stimulate consumer purchasing and dealer effectiveness
4. Publicity: this is the dissemination of information by personal or non-personal means and is not directly paid by the organization, and the organization is not the source.

Many weight loss programmes do advertisements through the media which could be television, radio, magazines, signboards, and billboards as well as fliers. The media strategy, however, is connected with the channel of communication. The message must also communicate benefits, feelings, brand personality, action, and content. Each

medium has its merits and its handicaps, as such the suitability and profitability of any one type varies. (Percy & Rosenbaum-Elliott, 2016).

In weight loss, attrition happens when a client reaches the goal weight and stops using products and services. It can also be when a client fails to lose weight through the prescribed system and quits out of disappointment (Mclean et al, 2016). Successful clients can, therefore, become excellent sales reps in such situations through maintenance programmes and recognitions. It is also helpful to partner with relevant others like local doctors and beauty shops in order to attract new clients; some weight loss companies and consultants also create a sense of community with a regularly emailed newsletter to clients.

A peculiar strength with fitness centres is a recommendation from existing satisfied members. Weight loss firms also do well with recommendations and media publicity, and perform more strongly when they partner with hospitals and other health centres. Holding events is another way to attract new customers and most weight loss firms like Herbalife and Forever Living are good at organizing seminars and workshops and thereby increasing the number of their customers. These weight loss companies sometimes extend their marketing to giving away samples on trial bases and showing off their success stories. The fact that some weight loss firms use the multi-level structure of marketing motivates distributors to make every effort to increase sales and this increases their income which directly increases sales volume in their respective organizations.

Place refers to distribution or the methods and location you use for your products or services to be easily accessible to the target customers. Service providers have to give special thought to where the service would be provided (Kotler & Armstrong, 2010). Proximity is key when it comes to weight loss programmes. People prefer fitness centres that are in their neighbourhood or close to their place of work. The infrastructure is also a factor. A spacious facility with modern equipment and wellorganised set-up is an added advantage to the fitness centre. It attracts people and gives the opportunity for networking and building useful relationships. Health shops located close to health centres can also have a competitive advantage over those

situated far apart.

The culture of the people in a community also plays a role in marketing weight loss products and services. According to Johnston (2004), there is a relationship between an individual‟s income and the probability that an overweight individual correctly recognises their overweight status and attempts to lose weight. People with highincome status or living in plush areas tend to have more interest in exercise programs and patronize health products much more than the poor. As such any weight loss business in an area like that will be much appreciated and can do better than an area with sedentary culture. A good and resourceful place can generate higher revenue and at the same time higher customer satisfaction. This, in turn, will increase profitability and create room for expansion.

2.3 Strategies and Marketing Perspectives of Weight Management Programmes

Over the past two and a half decades, service marketing has emerged as a wellestablished field of research in the marketing discipline. For Grove et al. (2003),

service marketing now faces a challenge that confronts many maturing fields of study; as the domain of service marketing has expanded, the boundaries that define it have become more unclear. According to Grove et al. (2003), the services marketing literature has reached its maturity stage. As a result, the WHO Global Strategy on Diet, Physical Activity, and Health (2004) report provides an important basis for action. It synthesizes available evidence for action and aims to facilitate the development and implementation of national action plans to improve diets and increase physical activity, with specific reference to healthy weight. It is directed to whole population approaches. The Strategy emphasizes the infrastructural support required at national levels to promote the widespread adoption of healthy diets and physical activity and achieve population level impact. It proposes a range of actions, covering interventions related to consumer information, including food labeling and marketing; policies, including agricultural, fiscal and food policies; the role of health services in prevention; and investment in research and evaluation.

Indeed, various dimensions of marketing exist. These include the external, internal and the interactive dimensions. In external marketing, marketers interact directly with the end users. They try to understand the need of customers and satisfy them after fulfilling their demands. In external marketing, marketers set the pricing policies and create awareness about the products and design promotional strategies and techniques that help to attract customers towards their products and services. They communicate with their customers directly and convince them to buy their products. The same phenomena are practiced by the weight management firms within the metropolis.

Conversely, in internal marketing, marketers try to interact with their employees in order to know about the strengths and weaknesses of their organization. The owner of the company tries to involve all of his employees in general discussions and believes in teamwork. Internal marketing involves general discussions, teamwork, training, motivation and rewards for the best performance. Interactive marketing involves the delivery of products or services to the customers and front-office employees of the company. It is the most important part of the service marketing triangle because it establishes long term or short term relations with customers. Customers who are highly satisfied with their products or services can become regular customers of their brand.

In the U.S. for instance, children 2-17 years old spend approximately 4.5 hours a day watching some kind of electronic screen, with 2.5-2.75 hours of that spent watching television (Woodard et al., 2000). National cross-sectional surveys have shown a positive association between the number of hours children watch television and their risk of being overweight (Dowda, et al., 2001; Crespo, et al., 2001). This correlation probably has several causes: television-watching may displace calorie-burning physical activity, children may eat more while watching TV, television advertisements may induce children to consume more high-calorie foods and snacks, and TV viewing may reduce children‟s metabolic rate (Crespo, et al., 2001; Gortmeker et al., 1999).

Community-based programmes should use multiple approaches in providing people with the knowledge, skills, and attitudes necessary to eat a healthful diet and be physically active. These programmes should work with local organizations to identify

target populations and should solicit full community participation in a comprehensive approach that addresses the physical, social, political, and cultural environments affecting community members.

High fruit and vegetable intake are associated with low dietary fat intake, and dietary fat is associated with both cancer and heart disease (Ness and Powles, 1999). The Healthy People 2010 objectives related to fruit and vegetable consumption include recommendations to consume at least three servings of vegetables and two servings of fruit per day (Department of Health and Human Services, 2010). The Guide to Community Preventive Services recommends five population-based strategies for increasing a population‟s level of physical activity (Centres for Disease Control and Prevention, 2001). These strategies include ways to achieve Healthy People 2010 objectives that deal with moderate and vigorous lifestyle activities for adults and young people (Department of Health and Human Services, 2010).

1. Individually targeted programmes. Programmes tailored to a person‟s readiness for change or specific interests; these programmes help people incorporate physical activity into their daily routines by teaching them behavioral skills such as setting goals, building social support, rewarding themselves for small achievements, solving problems, and avoiding relapse.
2. School-based physical education (PE). School curricula and policies that require students to engage in sufficient moderate to vigorous activity while in school PE class.

Indeed, the economic burden of poor diet, physical inactivity, and obesity is substantial. In determining the prices of services, the one characteristic which has great impact is their perishability and the fact that fluctuations in demand cannot be met through

inventory. Another characteristic of services that creates a problem in price determination is the high content of the intangible component. The higher the intangibility, the more difficult it is to calculate cost and greater the tendency towards no uniform services, such as fees of doctors, management consultants, etc. In such cases, the price may sometimes be settled through negotiation between the buyer and seller (Ahsanath, 2011).

2.4 The Policy Context of Weight Management Programmes

Experiences from places indicate that state policies for promoting healthy diets and physical activity should describe how the comprehensive state policies and programmes will coordinate to address nutrition, physical activity, or obesity prevention (Macera, C. A., 2014). In addition to convincing people to be more physically active and eat a healthier diet, public health organizations should work to create environments, systems, and policies that:

i. Serve as passive inducements to being physically active and eating a healthy diet.
ii. Eliminate barriers to being active and eating a healthy diet.
iii. Provide explicit support, reinforcement, and inducements to making healthy choices such as taking stairs rather than riding elevators or eating fruits or vegetables instead of less healthy foods.
iv. Establish themselves as partners in planning and decision-making on environmental and policy issues that affect people"s eating and physical activity habits.

Indeed, various legislations and country by country policies differ on weight management programs. Countries that lack these policies tend to borrow ideas from international organizations like the WHO.

2.5 Causes of Obesity

Energy is gotten from food intake. When this energy is expended, we burn calories. Generally, obesity is caused when there is energy imbalance brought on by a change in energy intake, energy output, the efficiency of energy use, or a combination of these. A negative energy balance is the most important factor affecting the amount of weight loss and rate (Hill et al., 2012). Some experts in public health attribute overweight and obesity to urban lifestyle, socioeconomic status, family size, and educational status. Persons who spend their leisure inactively by watching television for long hours, sleeping for long hours just to mention a few are at risk. That notwithstanding, there are other specific causes of obesity discussed below (Wing &

Phelan, 2005).

2.5.1 Unhealthy Diet

One of the main causes of obesity is diet. Diet plays an essential role in the development of obesity. Foods with high fat, salt, and sugar content do more harm than good. Diets have changed significantly over a relatively short period of time. Studies looking at daily energy consumption have shown a significant increase in intake in most countries of the world over the past 30-40years (Mason, 2011). Some factors that have contributed to dietary change are the abundance of high fat and sugary foods. For instance, a lot of people due to busy schedules are unable to cook or choose healthy meals but rather resort to fast foods and high-calorie foods. There is also the benefit of controlling food portions when eating in order to prevent overeating. In order to achieve a weight loss of 1 to 2 lb a week, a person has to reduce their calorie intake by 500-1000 kcal daily (American Dietetic Association,

2009).

2.5.2 Physical Inactivity

According to the World Health Organisation, any bodily movement produced by skeletal muscles that result in energy expenditure is defined as physical activity. The balance of joules taken in as opposed to joules used up during activity determines whether an individual will gain, lose or maintain weight. Regular physical activity is one way that can help reach and maintain a healthy weight. There are numerous benefits of being physically active. These include mental alertness, reduction of some health related issues and diseases, mood improvement, more energy.

Thirty minutes of moderate intensity exercise is recommended by experts for most days of the week. Some physical activities include aerobics and strength training (Cook & Schoeller, 2011). Exercise can have positive effects on weight loss, weight control, and overall general health; there is debate however on the duration and intensity, and the most effective one in order to achieve this.

Sedentary lifestyle, on the other hand, contributes a lot to weight gain. Exercise raises our body metabolism and enables us to lose weight. The nature of work of an individual if mostly immobile doesn‟t utilize much energy than that consumed. Quite a number of the population are unable to exercise due to their busy schedules and lack of motivation. The world health authority has identified physical inactivity as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths per year (World Health Organization, 2010). Factors contributing to inactivity include car

ownership, the use of labour saving devices such as vacuum cleaners and washing machines, and busy schedules.

2.5.3 Genetics

This shows how the characteristics of living things are transmitted from one generation to another. Genetic makeup can regulate how our bodies capture, store and release energy from food. In some cases, genetics may lead to weight gain, for example, science shows that genes can directly cause obesity and disorders such as Bardet-Biedl syndrome and Prader-Willi syndrome. However genes do not always predict obesity, behaviour is a key factor for a person to be overweight. There are situations where a person‟s genetic makeup makes them likely to be overweight but this usually goes together with external factors such as physical inactivity and abundant food supply (Coulston & Boushey, 2008).

2.5.4 Life Events

Certain key periods in life can bring about weight gain for instance puberty, menopause, and pregnancy. Menopause is considered to be a critical time for women to gain weight. This is particularly significant in the two years leading up to the menopause as hormone levels decline and fat tends to be redistributed around the body. Key life events such as severe injury and postpartum moments can also cause this. Studies have indicated that less than 2% of people who are considered obese can attribute their obesity to medical problems (Mason, 2011).

2.5.5 Culture

Some researchers also attribute obesity and being overweight to obesogenic environments where people are frequently exposed to and consume savoury foods with hidden fats and sugars (Kumah et al. 2015). Culturally, Ghanaians perceive large body size to be positive, especially women in that category are perceived as beautiful and happily married if they are. This attitude could pose a psychological barrier that limits awareness of overweight/obesity as well as motivation for weight control. A study undertaken in Kumasi, the second largest city in Ghana, revealed the rate of overweight and obesity to be about three times more among women than in men in the metropolis (26% versus 8%, respectively) (Appiah et al. 2014).

2.6 Effects of Obesity

Obesity has many effects on the individual, especially health related risks which include diabetes, cardiovascular diseases, and certain cancers (WHO 2000). In some women, it has been associated with infertility and pregnancy complications, and increased neonatal mortality studies show that obese women are five times more at risk from cardiovascular diseases compared to those with normal body weight (Ezzat, 2012). In order to control mortality rates, morbidity, and risk of developing some diseases like type II diabetes, the subject of weight loss should be seen as important (Afridi et al., 2003). Studies have shown that reducing body weight by 10 percent can significantly improve blood pressure, cholesterol and plasma lipid levels, blood glucose level and type 2 diabetes (Wing et al, 2011). There is high economic burden involved in managing these conditions associated with obesity and overweight. In some societies, obese and overweight people are stigmatized and perceived as unclean, immoral and voracious (Puhl & Heuer, 2010).

2.7 Public Awareness of Obesity and Intervention Programmes

According to Kabat-Zinn (2008), mindfulness can be defined as the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding experience. There is some evidence of the efficacy of mindfulness-based interventions in weight loss. The mass media have images and messages that have impacted physical and mental health; commercials on health and fitness, women‟s magazines and how to lose so much weight in a short time floods the media. This in a way also creates some level of awareness among the public (Latif et al, 2011).

Prochaska, (2008) came out with findings that there stages of awareness till an individual decides to go through change. Such that an obese person who decides to work on his weight may go through them, these stages are mentioned below.

Pre- contemplation - This is a stage where a person is unaware they have a problem and it is rare that anyone at this stage will work on their weight. The fact is that they are simply not aware of their weight status. Contemplation - An obese person at this stage has now begun to think about bringing a change in their weight and lifestyle. And this could be due to the fact that they may be experiencing some discomfort or health issues because of the weight. Preparation - At this stage, a person has made a decision to change and has started to make preparations to make this change. Action - In the action stage, an obese person has begun to take action to change their behaviour. Here they may enrol in a weight loss programme and show commitment to it. Maintenance - This is a stage where the person has been able to sustain a change for a period of time (generally viewed as over 12 weeks) and is aware of the triggers and relapse.

2.8 Intervention Theories

According to Ajzen, (1991), the International Journal of Behavioural Nutrition and Physical Activity (2007) outlines some basic theories that come to play in the treatment of weight loss. The theory of planned behaviour was previously known as the theory of reasoned action (1980). It explains that there are certain behaviours over which people have the ability to exercise self-control. The key component to this model is behavioural intent; behavioural intentions are influenced by the attitude about the likelihood that the behaviour will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome (Netemeyer & Ryn,
1991).

The Trans-theoretical model also called the Stages of Change model was developed by Prochaska and DiClemente in the late 1970s, it revolved around smokers and it was realized that they quit this habit if they were ready to do so. Thus, this model focuses on the fact that an individual makes an intentional decision to change and assumes that people do not change behaviours quickly and decisively but rather continuously through a cyclical process (Prochaska & Velice, 1997).

The Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura. This model proposes that learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behaviours. It says that individuals acquire and maintain behaviour, while also considering the social environment in which they perform the behaviours. It considers a person‟s past,

expectations etc. which all share the reasons a person engages in a particular behaviour (Cioffi, 2002).

Self-Determination Theory assumes that all people have an innate tendency toward growth, self-integration, and psychological consistency. Three psychological needs that form the foundation for self-motivation and self-integration are competence, autonomy, and relatedness. Being competent means you are able to do something efficiently and you have confidence in your skills and can control your destiny; autonomy being the need to act freely as you will, whereas relatedness is to be connected, feel accepted and supported in your relationship with others. An individual‟s social environment can either nurture a person‟s feelings of competence, autonomy, and relatedness or it can be so controlling and overly challenging that it can retard one‟s self-motivation (Palmeira et al. 2010; Karasu, 2013).

2.9 Weight Loss Intervention Programmes

According to the American Dietetic Association (2009), the goals of weight management are not limited to the scale but rather to reduce body weight, keep the weight low for a long term and as much as possible prevent further weight gain.

Some other goals of weight management interventions may include being able to improve emotional and physical health and the maintenance of the weight. For the purpose of this research, the various intervention programmes which are non-clinical will be discussed.

2.9.1 Fitness Centres

Fitness centres are generally places where people go to exercise, for example, lift weights or use other equipment. It can also be called a health club but it is commonly referred to as a gym. Most fitness centres have a workout area for exercises. They also employ personal trainers who train their members and their services include devising a customized fitness routine for individuals and groups. These fitness centres usually have certified instructors who assist with various exercises such as cycling, aerobics and high-intensity interval training. The instructors need certification because they must ensure participant safety and positive results from the workouts.

2.9.2 Weight Loss Consultants

Weight loss consultants are professionals who attend to the needs of their weight loss clients. In their consultations, they evaluate the client‟s history, health status, dietary intake and activity and provide tailored services to enable them to meet their weight loss goals. Generally, clients are seen for one initial consultation which will last for about an hour and then clients follow with the regular meeting as per the agreed arrangement (Mason, 2011).

2.9.3 Dieting

Some people resort to dieting in order to lose weight. Reduction strategies may vary from a focus solely on energy that is “calorie counting”, macronutrient composition and/or energy density, or a combination of energy and macronutrient composition. Examples are meal replacements and very-low-energy diets (Karkanen et al., 1998).

There is still debate regarding the energy content and the macronutrient distribution for promoting healthy and effective weight loss, even though there has been extensive

research. The effectiveness of diets low in fat has been challenged. This is as a result of the continuous rise of obesity despite a reduction in fat intake. The popularity of low-carbohydrate diet in recent clinical trials show they are effective in the long term. However, the health related aspects need to be studied in detail. Any weight loss plan that doesn‟t factor the long term will likely be a failure and result in weight gain (Volek et al., 2005).

Some strategies used in dieting include meal timing, portion control and meal frequencies. There are various diets embarked on to aid weight loss. Some popular ones include the Dukan diet, Atkinson diet, Fruit diet and Paleo diet.

One useful guide is to eat the right nutritious meals in their right proportions. The Eat Well Plate, for instance, helps to do that. It is a pictorial summary of the recommended daily meals and needed portions for healthy living. It shows the proportions of different food groups that make up a balanced diet over 1-2 days and not necessarily every meal.

2.9.4 Weight Management Groups and Companies

There are a variety of weight management groups that attend to the needs of people. Most of these companies focus on getting their clients reduce and maintain their weight. They have agents or distributors, support groups, and other professionals who do this. Internationally, there are companies like Weight Watchers, Jenny Craig, Nutrisystem, and Medifast. Examples of such weight loss companies in Ghana are Herbalife, Forever Living, Edmark, just to mention a few. Most of these companies have products ranging from beauty to health. In terms of weight loss, they usually use meal replacement supplements, fat burning and detoxification supplements. A lot of people resort to food supplements because they are said to be natural, less demanding than an entire lifestyle

change such as exercising and dieting, easily available without a prescription and inflated advertising claims. Below is a table of some common supplements and their intended results.

Table 2.1: Common dietary supplements are classified according to purported mechanism

Increase energy expenditure	Ephedra, Bitter orange, Guarana, Caffeine Country mallow, Yerba maté
Modulate carbohydrate metabolism	Chromium, Ginseng
Increase satiety	Guar gum, Glucomannan, Psyllium
Increase fat oxidation or reduce fat synthesis	L-carnitine, Hydroxycitric acid, Green tea, Vitamin B5, Licorice, Conjugated linoleic acid Pyruvate
Block dietary fat absorption	Chitosan
Increase water elimination	Dandelion, Cascara
Enhance mood	St. John‟s wort
Miscellaneous or unspecified	Laminaria Spirulina [also known as bluegreen algae] Guggul Apple cider vinegar

Source Saper et al., (2004)

2.10 Effective Weight Loss and Maintenance

The general perception is that no one succeeds in maintaining long-term weight loss. However, research has however shown that about 20% of overweight individuals are able to sustain weight loss if they lose about 10% of their initial weight and are able to maintain for at least a year. Maintenance thus becomes easier after individuals

successfully maintain their weight loss for a period of 2-5 years. This greatly increases their chance of longer term success (Wing & Phelan, 2005).

In order to successfully maintain weight, a significant amount of initial weight loss coupled with a physically active lifestyle, regular meals including breakfast, portion control and self-monitoring is essential. Furthermore, having an internal motivation to lose the weight, social support and being able to cope well in handling stress and life issues greatly result in weight maintenance.

In the Public Health Nutrition Journal, Barichella et al, (2011) evaluated the awareness and knowledge about weight status and its management in northern Italy. Out of a total of 914 participants being 605 females and 309 males, 83.5%considerd obesity to be a disease whereas 38.5% were likely to misperceive their weight status. 38.8% of normal-weight adults believed themselves to be overweight, whereas 71.1% and 37.5% of classes I and II/III obese adults classified themselves as being overweight and mildly obese, respectively. Most of the overweight (90.2%) however mildly (96.8%) and moderately obese adults (99.1%) recognised the need to lose weight.

In the research by Britwum & Mensah (2005) on The Epidemiology of Obesity in Ghana, it was seen that obesity was more common in females than in males 7.9% and 2.8% respectively. Obesity was highest in Greater Accra (16.1%) and virtually not present in Upper East or Upper West. Their research also came out that ethnicity obesity was highest among Ga-Adangbe, Ewes, and Akans 14.6%, 6.6% and 6.0% respectively. Obesity was highest among the employed compared to the selfemployed. The married also were more obese than the single. Prevalence of obesityby-age increased by age up

to 60 years and respondents with higher educational status had more obese individuals. There were more overweight and obese in the urban high-class residents compared with the low-class residents and in urban than in rural subjects.

A study carried out to determine the prevalence of obesity associated with systemic hypertension in four communities in Accra revealed the following results. A total of 598 persons, of whom 257 were male and 341 female aged 15yrs and above were examined. The results show that 22.6% were overweight 17.2%. Obesity in women was about twice in men. The prevalence of hypertension (BP > 140/90mmHg) was 26.8%. The study showed a positive relationship between body mass and hypertension. The study showed that overweight/obesity is common in Ghana and that the risk of it increases with age till the age of 65 years; this study also proved that overweight/obesity tended to be more common in females (Bosu, 2010).

Elfhag & Rössner (2005), in their research, mention some factors that aid in weight loss and maintenance. These include social support and motivation. It has been suggested from a literature search that many studies do find that a higher pretreatment motivation is helpful. Self-efficacy means a confidence in the personal ability to manage life obstacles and accomplish an achievement such as weight loss

(Carlson, 2014).

2.11 Overview of Weight Management in Kumasi

Appiah et al, (2014) did a study to determine the relationship between dietary intake, physical activity level, body size preference and body mass index (BMI) in women in the Kumasi metropolis. A cross-sectional study was conducted among 394 women, aged 20 years and above, in 6 randomly selected churches in the Kumasi metropolis.

The study came out with findings that overweight/obesity was high among women in Kumasi. Dietary energy intake, low physical activity, and preference for a large body size were positively associated with overweight/obesity among women in Kumasi, Ghana.

In their research on The Prevalence of Overweight and Obesity among Students in the Kumasi Metropolis, a total of 500 students between the ages 10-12 years were sampled from three randomly selected secondary schools and two junior high schools with the multistage sampling technique. 290 students were males and 210 females. The results were as follows: underweight, normal weight, overweight, and obesity were 7.40%, 79.60%, 12.20%, and 0.80%, respectively. Hence the more prevalent among the students was the overweight. The writer expressed the need to establish effective public health promotion campaigns among students in order to curtail future implications on health (Kumah et al., 2015).

2.12 Conceptual Framework for the Study

There have been various studies on weight loss with respect to health risks, awareness, different types of intervention programmes and their effectiveness. This study looks, particularly at the Kumasi metropolis. It is realised that there is some gap in research so far as the weight loss programmes are concerned and their effectiveness. When an individual is aware of his weight status, he/she can go on to identify and resort to any of the available intervention strategies to lose the weight. The type of weight loss strategy used determines how effective it will be. However, certain factors like cost in taking part of the programme, proximity and availability of the programme and instruction of use can also influence the results. Initially, the weight loss goal given to patients is a decrease of about 10%. If this is achieved, further steps can then be taken.

This is because a decrease of 10% can significantly reduce the obesity-associated risks. Studies also show that an average of 8% loss can be achieved in 6 months and this is realistic and good for any intervention programme (Pi-Sunyer et al., 1998). Evidence shows that those more successful with weight loss are the ones who lose weight gradually and steadily about1-2 pounds per week. Healthy weight loss consists is an ongoing lifestyle that includes long-term changes in daily eating and exercise habits (Mogre et al., 2013b).

According to the American Dietetic Association (2009), there are a number of different strategies that result in weight loss. However, weight management is more than merely losing weight. It means prevention of weight gain at any BMI level and preventing regain as well. Successful weight loss maintenance may be an outcome that is determined by multiple variables, each contributing differently to a successful outcome. Such variables might include factors such as perception of weight loss success, the level of self-monitoring, the level of physical activity, type of intervention (including frequency of contact), coping style, and stressful life (Seagle et al., 2009).

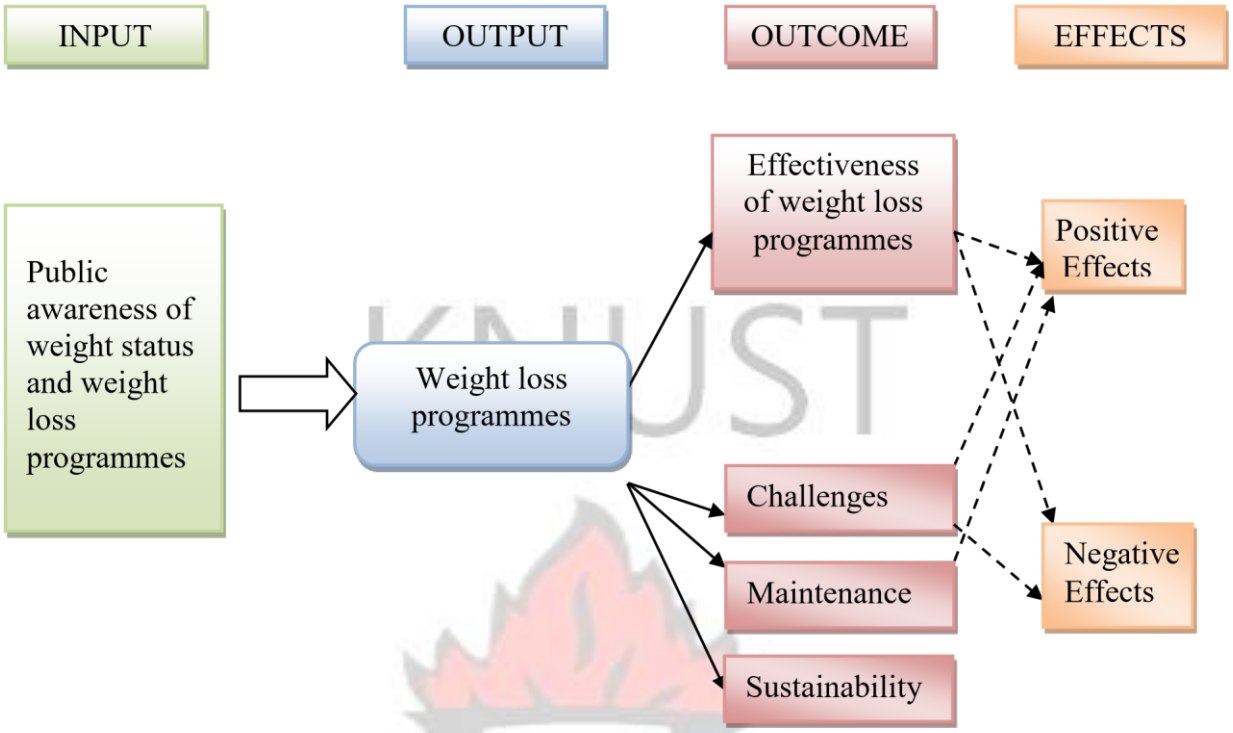

Figure 2.1: Conceptual Framework of the Study Source: Author"s Construct, 2016

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter deals with the methods used to carry out the study: areas given consideration in this chapter are, the research design, the study area, and the target population of the study. The sample and sampling procedure, as well as description and

administration of research instruments and data analysis, form the concluding part of the chapter.

3.1 Research Design

The study sought to assess the weight loss programmes in the Kumasi metropolis. This required the use of the descriptive survey method. According to Amedahe (2002), the descriptive design determines and reports on issues the way they are. Amedahe (2002) saw the descriptive design as primarily concerned with collecting data in order to test hypotheses or answer research questions pertaining to the current status of the subject of the study. Amedahe (2002) also said that the descriptive research design is concerned with conditions or relationships that exist, such as the nature of prevailing conditions, practices, attitudes and opinions held by people about issues or phenomena processes that are going on and trends that are being developed.

Quantitative research methodology was used. The most commonly used method of data collection in quantitative research is the use of questionnaires for primary data collection. The data usually consists of numbers rather than words and may be analyzed mathematically or with computer programmes (Castellan, 2010).

3.2 Sources of Data

In this research, primary data was collected. Primary research consists of a collection of original primary data collected by the researcher. It is often undertaken after the researcher has gained some insight into the issue by reviewing secondary research or by analyzing previously collected data. Primary data is the raw data collected from the field through direct efforts of the researcher. This can be obtained through the use of instruments such as interviews, surveys, and direct observation. Though this method of

collecting data is costly, it provides more current and relevant information to the project under review (Hox & Boeije, 2005).

3.3 Unit of Analysis

The respondents for the study were registered members from selected fitness centres in Kumasi. There were also customers from selected weight loss firms. These categories of people were selected because in assessing weight loss programs, there was the need to have the views of those directly involved in the industry.

3.4 Population

According to Mason et al (1999), the population of a research is the collection of all possible individuals, objects or measurements of interest. It constitutes a set of persons or objects that possess at least one common characteristic. The target population of the current study, therefore, constituted individuals enrolled in selected fitness centers and weight loss firms in Kumasi. The researcher focused on individuals enrolled in 10 fitness centers and 10 weight loss firms. A total population of 420 people, made up of 250 members from the selected fitness centers and 170 members from the selected weight loss firms was settled on.

3.5 Sample Size

For a defined target population of approximately 420 a sample size of 204 is deemed appropriate and effective under an error margin of .05 (Krejcie & Morgan, 1970). This sample size is further justified by the sampling formula of De Vaus (2002). The calculation of the sample size using the De Vaus formula is shown below:

$n = N / 1 + N(\alpha^2) = 420 / 1 + 420(.05)^2 = 204$

n = sample size

N = population

□□ margin of error

The distribution of the sample size is shown in Table 3.1.

Table 3.1: Sample Size and Respondents Distribution

Strata	Number	Target pop.	Percent	Sample Size	Respondents
Fitness Centres	10	250	59.5	119	78
Weight loss firms	10	170	40.5	85	34
Total	20	420	100.0	204	155

Source: Field Survey (2016)

3.6 Sampling Technique

The units of enquiries were the enrolled individuals of the fitness centres and that of weight loss firms. To survey these individuals, a multistage sampling procedure was employed in the study. In the first stage of the multistage sampling procedure, individuals were stratified on the basis of the program type. Hence, the individuals were categorised under two strata such as fitness centres and weight loss firms. In the second stage of the sampling procedure, 10 fitness centres and 10 weight loss firms were sampled through a convenient sampling method. According to Saunders et al. (2009), convenience sampling technique assists the researcher to randomly select cases that are easiest to obtain for a sample. For the purposes of this study, convenience sampling technique was used to select respondents for the study. The convenience sampling technique enabled the researcher to select respondents she could easily obtain to participate in the study. In the third stage of the multistage sampling procedure, convenient sampling method was further employed in the selection of the customers of the fitness centres and weight loss firms.

3.7 Data Collection Instrument

The primary data for the study was collected using a structured questionnaire. The structure of the questionnaire was principally in a closed-ended questioning format. The various forms of closed-ended question response types employed included rating, multiple choice and dichotomous. The questionnaire was in four major sections. The section employed items or statements to examine the socio-demographic background of the respondents. The key demographic data considered in the section included gender, the age of respondents, the level of education, marital status, and employment status. In the second section, statements or items were employed to examine the awareness of the respondents on the various available weight loss programmes. The third section of the questionnaire employed items to examine the effect of weight loss programmes on clients of the programmes. The fourth and last section of the questionnaire employed questions or items to examine the various challenges associated with weight loss programmes.

3.8 Data Analysis

Data collected from the field was sorted out, checked and thereafter coded. The Statistical Product and Service Solution version 16.0 (SPSS) software was used to key in the data after which simple frequencies and percentages were generated and adopted for analysis of the data. Data on the sociodemographic background of the respondents and the awareness of the respondents on weight loss programmes available was analysed using descriptive methods through frequencies and percentages. However, the effects of the weight loss programs on clients were examined through the Spearman‟s Rank Correlation method. Effect of weight loss programmes was further examined using cross-tabulation method and further testing for possible relationship using chi-

square method. The factors influencing weight loss program participation of the respondents were examined through a multiple regression analytical method.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

4.0 Introduction

The previous chapter examined the methodology for the study. This was done by gathering data that was appropriate for the study. The response rate was 75.9%. This chapter presents the output of data analysis.

4.1 Background of Respondents

The background information of respondents was considered important because the ability of the respondents to give satisfactory information on the study variables depends, to a large extent, on their background. The information solicited in this area

included the gender, age, educational level and income levels of respondents. The background information of respondents is presented in Table 4.1.

From the study, there were more females than males with frequencies recording 100 to 55 from a total of 155 respondents. This was not surprising because a study undertaken in Kumasi in 2014 revealed the rate of overweight and obesity to be about three times more among women than in men in the metropolis (26% versus 8%, respectively (Appiah et al., 2014) Again, people between the ages 36-45 were the highest respondents as compared with the lowest age bracket 56 and above.

There were a greater number of people who had obtained tertiary education. Married people were more eager to undergo this study compared to the singles. Most of the respondents who underwent these studies were also employed compared to students who recorded the lowest as showed in Table 4.1.

Table 4.1: Socio-Demographic Characteristics

	n	%
Gender		
Male	55	35.5
Female	100	64.5
Age of respondent		
26-35	64	41.3
36-45	57	36.8
46-55	23	14.8
56 and above	11	7.1
Level of education		
SHS	8	5.2
Tertiary	59	38.1
Degree	52	32.9
Postgraduate	12	7.7
Informal	21	13.5
Others	4	2.6
Marital status		
Single	53	34.2
Married	102	65.8

Source: Field survey 2016

4.2 Awareness of weight loss programmes

There are various intervention programs for weight loss as discussed in the literature review. For this analysis, however, the ones identified and used were the gym, weight loss firms who run special programmes including weight loss consulting or coaching, weight loss pill and dieting. From the study, it was possible to tell the level of public awareness of the various intervention programmes for weight loss. The respondents who had knowledge about the gym were the highest with a percentage of 29.68%. The least were those who specified other weight loss programs and this included the taking of local herbs and fasting. They constituted a percentage of 5.81%. Between these two categories were those who knew about a number of weight loss programmes.

Hence from the above statistics, it was seen that most respondents had a fair knowledge of their weights, their heights and the kind of programs available. Most of them were not happy with their overweight status. One of the reasons attributed to this was the level of education of the respondents. Most of them were educated, employed and between the ages of 26-45 yrs, and this supports the study by Devaux et al., (2011) that there is a relationship between educational status and change in weight.

Another reason for the wide coverage of awareness could be attributed to the publicity made on these weight loss programmes. According to Hobbs et al, (2006) and McCabe & Ricciardelli (2001), the media has much influence on body image and strategies to change body size. Commercials and celebrity endorsements on televisions, magazines and other media carry weight and this could be the reason why most respondents were aware of weight loss programmes.

Table 4.2: Awareness of weight loss programmes

Weight Loss programmes	N	%
Gym	46	29.68
Weight loss company	19	12.26
Liposuction	5	3.23
Dieting	6	3.87
Gym and weight loss company	10	6.45
Gym and liposuction	8	5.16
Gym and dieting	20	12.90
Weight loss company and liposuction	5	3.23
Weight loss company and dieting	5	3.23
Liposuction and dieting	7	4.52
Gym, weight loss company, liposuction, and dieting	15	9.68
Other specific	9	5.81

Source: Field survey 2016

4.3. Factors influencing weight loss programme participation

The diagnostic result shows that the model exhibits good fit of the model. The adjusted R2 result of .569 indicates that 56.9% of the variations in the dependent variable (programme participated) are attributed to the predictors of the model. The Durbin-Watson result of approximately 2.0 also provides evidence of the absence of autocorrelation in the model estimate. The significance of the F-statistics further provides evidence of the good fit of the model. The tolerance values of the predictors of the model are all above .10 and the variance inflation factors (VIFs) are also all above 10, and this provides evidence of the absence of multicollinearity in the model.

The regression result of the model estimate is presented in the table below.

Table 4.3: Factors influencing weight loss programme participation

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
(Constant)	.911	.204		4.457	.000		

Noticed any change	.188	.046	.193	4.062	.000	.49	2.04
Change in weight	.278	.051	.278	5.446	.000	.43	2.35
Committed to program	.179	.047	.194	3.767	.000	.42	2.39
Benefit of program	.143	.046	.166	3.108	.002	.39	2.58
Period weight loss	-.021	.044	-.026	-.477	.634	.38	2.61
Satisfaction	.067	.030	.106	2.283	.023	.51	1.94

R	.754
R^2	.569
Adjusted R^2	.563
Std. Error of Model	.62168
F-Statistics	85.870(6)***
Durbin-Watson	1.983

a. Dependent Variable: Program Participated

Source: Field Survey, 2016

The result of Table 4.3 shows that there is a positive relationship of .193 between change notice and programme participation at a statistical significance level of 1%. This, therefore, indicates that any significant unit improvement in noticed changes in the body of the respondents stimulates the further participation of the respondents in the weight loss programmes. The change in the weight of the respondents positively influences the respondents‟ participation in the weight loss programmes at a statistical significance level of 1%. This, therefore, indicates that any significant unit improvement or change in the weight of the respondents is associated with .278 unit improvement in the respondent‟s participation in the weight loss programmes. The commitment level of the respondents positively influences their level of participation in weight loss programmes at a statistical significance level of 1%. This, therefore, indicates that any significant improvement in the commitment level of the respondents is associated with .194 unit improvement in the respondent‟s participation in weight loss programmes. The benefits of the weight loss programmes to the respondents positively influence their participation in the weight loss programmes at a statistical

significance level of 1%. This, therefore, indicates that any significant unit change in the benefit of the programmes is associated with .166 unit increases or improvement in the participation of the respondents in the weight loss programmes. Furthermore, the result of the Table.4.3 shows that there is a positive relationship of .106 between the satisfaction level of the respondents and their participation in weight loss programmes at a statistical significance level of 5%. This, therefore, indicates that any significant unit improvement in the satisfaction level of the respondents is associated with .106 unit improvement in their participation in the weight loss programmes.

4.4 Effects of Weight Loss Programmes on Clients

In order to access the effectiveness of the programmes on clients, some factors considered were the type of weight loss program embarked on, times they checked their weights, how committed they were to the program, the progress made and the period over which they made that progress. The cross tabulation correlation and the chi test were used to assess the relationships, significance, and effect of the variables.

Table 4.4: Correlation results

		1	2	3	4	5	6	7
1	Program participated	1						
2	Noticed any change	-.074	1					
3	Change in weight	-.028	.459**	1				
4	Period of weight loss	.087	.288**	.440**	1			
5	Commitment to program	.040	.102	-.006	.279**	1		
6	Satisfied with program	.086	.249**	.239**	.292**	.237**	1	
7	Benefit of program	.114	.028	.070	.043	.016	.137	1

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

Table 4.5: Effect of weight loss programmes

	N/%	Participated Programme from weight loss firms						Relationship test	
	Gym	Food supplements	Coaching	Weight loss pills	Dieting	Do it on my own	Total	Chi2 Test	Correlation
Check Weight								20.091(15)	0.18
Daily	13(16.9)	4(11.8)	1(50)	0(0)	1(4.5)	0(0)	19(12.0)		
Weekly	33(42.3)	17(50.0)	0(0)	1(50)	9(40.9)	8(47.1)	68(43.9)		
Monthly	22(28.2)	11(32.4)	1(50)	1(50.0)	10(45.5)	3(17.6)	48(31.0)		
Not Often	10(12.8)	2(5.9)	0(0)	0(0)	2(9.1)	6(35.3)	20(12.9)		
Noticed Change In Weight								1.743(5)	-0.074*
Yes	66(84.6)	29(85.3)	2(100)	2(100)	19 (86.4)	16(94.1)	134(86.5)		
No	12(15.4)	5(14.7)	0(0)	0(0)	3(13.6)	1(5.9)	21(13.5)		
Change In Weight								1.219E2(25)	-0.028
2-5KG	35(44.9)	17(50.0)	0(0)	0(0)	14(63.6)	8(47.1)	74(47.7)		
6-10KG	31(39.7)	14(41.2)	0(0)	1(50)	4(18.2)	8(47.1)	58(37.4)		
11-15KG	7(9)0	0(0)	0(0)	1(50)	2(9.1)	0(0)	10(6.5)		
16-20KG	1(1.3)	0(0)	0(0)	0(0)	1(4.5)	0(0)	2(1.3)		
Above 20KG	0(0)	1(2.9)	2(100)	0(0)	0(0)	0(0)	3(1.9)		
No change in weight	4(5.1)	(2(5.9)	0(0)	0(0)	1(4.5)	1(4.5)	8(5.2)		
Period Of Weight Loss								32.877(20)	0.087
2wks-1mth	11(14.1)	9(26.5)	2(100)	2(100)	5(22.7)	1(5.9)	30(19.4)		
2-4mths	41(52.6)	19(55.9)	0(0)	0(0)	7(31.8)	11(64.7)	78(50.3)		
4-6mths	13(16.7)	3(8.8)	0(0)	0(0)	2(9.1)	1(5.9)	19(12.3)		
Above 6mth	7(9)	0(0)	0(0)	0(0)	4(18.2)	2(11.8)	13(8.4)		
Not applicable	6(7.7)	3(8.8)	0(0)	0(0)	4(18.2)	2(11.8)	15(9.7)		
Commitment To Program								14.018(15)	0.040**
Daily	16(20.5)	10(29.4)	0(0)	1(50)	6(27.3)	3(17.6)	38(24.5)		
Weekly	36(46.2)	13(38.2)	0(0)	0(0)	6(27.3)	7(41.2)	62(40)		
Once or twice a month	10(12.8)	6(17.6)	0(0)	0(0)	5(22.7)	4(23.5)	25(16.1)		

Other	16(20.5)	5(14.7)	2(100)	1(50)	5(22.7)	3(17.6)	30(19.4)		
Benefit Of Program								14.41(15)	0.114
Optimal health	26(33.3)	12(35.3)	1(50)	0(0)	7(31.8)	6(35.3)	52(33.5)		
Weight loss	44(56.4)	15(44.1)	1(50)	2(100)	12(54.5)	5(29.4)	79(51.0)		
youthfulness	8(10.3)	5(14.7)	0(0)	0(0)	2(9.1)	4(23.5)	19(12.3)		
None	0(0)	2(5.9)	0(0)	0(0)	1(4.5	2(11.8))	5(3.2)		
Satisfaction with program								10.39(10)	0.86
Yes	67(85.9)	28(82.4)	2(100)	2(100)	14(63.6)	13(76.5)	126(81.3)		
No	9(11.5)	6(17.6)	0(0)	0(0)	8(36.4)	4(23.5)	27(17.4)		

Source: Field data 2016

From the table above, respondents of the various programs indicated how frequently they checked their weight. The chi test value showed a relationship between the variables. From the respondents, majority noticed a change in weight. Out of the 134 respondents who admitted noticed the change, those who attended the gym were the most respondents followed by weight loss companies and dieters. Respondents who took pills or were coached were the lowest respondents. 21 respondents recorded no change in weight. The correlation result of Table 4.4 shows that there is a significant relationship between change in noticing change weight loss and participation in weight loss programmes at a statistically significant level of 10. However, the insignificance of the Chi2 test between noticing change in weight loss and participation in weight loss indicates there is no relationship between the two variables.

From Table 4.4, majority of people lost between 2-5kg with the highest number of 35 coming from participants of the gym and that of the weight loss companies. For a weight loss of between 6-10kg, the table illustrates majority from the gym. The highest weight loss was above 20kg achieved by three people. Two respondents saw weight loss coaches and one had religiously stuck to a weight loss company (Forever Living) for years. Both the Chi2 test and the correlation test result of Table 4.5 revealed that there was no significance between the change in weight and participation in the weight loss programmes.

The period within which the majority of people lost weight was 2-4 months. 41 out of 78 respondents participated in the gym and 19 from the weight loss company. The relationship between the periods the respondents took the weight loss programme and their participation has no relationship evident from the insignificance of the Chi^2 test

(Table 4.5) and the correlation test (Table 4.4).

As shown in Table 4.5, comparing the commitment of respondents with the various programmes, it was realised that the majority who committed weekly represented those who went to the gym. The least were those who were enrolled in weight loss companies but were inconsistent with their supplement intake. The correlation result of Table 4.4, therefore, shows that there is a positive correlation of .040 between the respondent commitment and their participation in the weight loss programmes at a statistical significance level of 5%. However, the Chi^2 test result indicated otherwise.

Also, the majority of people found their chosen weight loss programmes beneficial. It either made them look youthful, lose weight, or provided optimal health. Of those who indicated optimal health, the majority were from the gym and weight loss companies. Most of the respondents were very satisfied with the programme with a percentage of 81.3% as against 17.4% who were not satisfied with their programme. Hallowell, (1996) in his study established that customer satisfaction led to customer loyalty which can rapidly increase profitability. Customers who had their needs met in one way or the other stuck with their chosen programmes and some further recommended to others.

4.5 Challenges Associated With Marketing Of Weight Loss Programmes

Elfhag & Rössner (2005), in their research, mentioned some factors that aid in weight loss and maintenance. These include social support, motivation, and mode of service delivery. It has been suggested from literature search that a higher pre-treatment motivation is helpful. From the study, it was realised that there was a challenge in the marketing of a product if proximity was a problem, as any distant location affected

participation. Some respondents also made it known that poor service delivery was a put-off and resulted in discontinuation of the programme. Some respondents also had challenges with the cost of the product which also affected their participation. Respondents who did not feel accountable to their choice of programmes also dropped out eventually. This supports the fact that success in marketing these weight management programs include but not limited to good location, well-differentiated products, and excellent service delivery as well as good pricing.

Table 4.6: Effects of the challenges of weight loss programmes on the participation of the programmes

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
(Constant)	.502	.512		.980	.329		
Proximity	.181	.299	.060	.604	.547	.352	2.844
Availability of personnel	1.646	.279	.865	5.893	.000	.159	6.270
Service delivery	-.437	.278	-.217	-1.574	.118	.180	5.544
Support & accountability	-.317	.307	-.069	-1.034	.303	.784	1.275
R	.696						
R^2	.484						
Adjusted R^2	.470						
Durbin-Watson	2.007						

Dependent variable:

The result of Table 4.6 shows that there is a positive relationship of .865 between the availability of personnel and the participation of the respondents in the weight loss programs at a statistical significance level of 1%. This, therefore, indicates that any

significant unit increase in the availability of personnel for the weight loss programme is associated with .865 unit increases in the participation of respondents in the weight loss programmes. Therefore the greater the challenge of availability of personnel for the weight loss programmes, the lower the participation of the respondents in the weight loss programmes.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter of the study summarizes the critical findings of the study, makes appropriate conclusions and suggests possible ways of having effective weight loss programmes.

5.1 Summary of Findings

The key findings of the study have been summarized in sub-sections on the basis of the defined research questions and objectives.

5.1.1. Identification and awareness of weight loss programmes in Kumasi There are a number of known weight loss programmes, however in this research, it was noticed that some of the programmes were not so common in Kumasi. Some of the common ones identified were the fitness centres or gym, weight loss companies dieting, dieting and weight loss pills. All the respondents knew about one weight loss programme or the other. Most of the respondents were aware of their weight status and were educate informing the reason why they were so much aware of the various programmes available.

5.1.2 Assessment of the effects of the respective weight loss programs

From the findings, it was realised that all the programmes were effective to an extent. The effectiveness looked at the weight change in a person with respect to the period they noticed the change and other benefits they had had from the programme. Some programmes though ineffective for some respondents, were just right for others. From the research, the majority of people seemed to have a liking for the gym. Those who

resort to the gym tend to check their weight weekly to track progress for their hard work. Those committed to a programme for long tend to see great results in the end. Those enrolled in the gym seemed to go weekly and had more social support too. The weight loss companies also see high commitments when there are good follow-up systems. Anyone who enrolled in any weight loss programme had a positive benefit which could be optimal health, youthfulness, weight loss and more consciousness on meal intake. As such, in assessing the number of people together with the results achieved at any given time with each of the products, it appears that the gym is more popular and well accepted.

5.1.3 Challenges Associated With Weight Loss Programmes

From the study conducted, a lot of people dropped from these programmes due to reasons such as poor service delivery from the providers, proximity, laziness and cost of products and service. Weight loss companies seem to have a lot of dropouts due to costs of food supplements. People who are not self-motivated may end up quitting early if the support system is very weak. It was noticed that the respondents who preferred doing it on their own suffered a lot from loneliness and lack of support. Hence to do it yourself you need to be well motivated and supported by home and environment. If any weight loss programme will be well patronised, the costs and support systems should be friendly.

5.2 Conclusion

Weight loss has become a very popular phrase lately and it is rapidly gaining a lot of attention in Kumasi. There are a number of known weight loss programmes, however in this research, it was noticed that some of the programmes were not so common in

Kumasi. Some of the common ones identified were the fitness centres or gym and programmes run by weight loss companies including dieting, weight loss pills, and nutritional supplements. The uncommon ones include weight loss surgery and liposuction. All the respondents knew about one weight loss programme or the other.

Apart from giving a beautiful outward appearance and confidence, weight loss reduces the risks of negative health implication, such as cardiovascular diseases and diabetes. Due to this, many people have resorted to different programmes in order to achieve their desired weight goal. Of all the programmes discussed it can be concluded that any weight loss programme that has a good blend of all four elements of the marketing mix (place, price, product and promotion) has the potential of satisfying customers and thereby becoming successful. This is reflected in the operation of the gym which appeared to be the more accepted option by the masses due to its moderate prices, word of mouth from existing clients and its commonness in various localities.

A lot of people dropped from these programmes because of reasons such as poor service delivery from the providers, proximity, laziness and cost of products and service. Weight loss companies seem to have a lot of dropouts due to costs of food supplements. People who are not self-motivated may end up quitting early if the support system is very weak.

5.3 Contributions to Theory and Practice

The concept of weight loss is a relatively new phenomenon in Ghana; hence findings from the study would serve as reference material for weight loss consultants, students and healthcare professionals such as nurses and doctors. This study as an academic exercise will contribute to intellectual knowledge on the types of weight loss

programmes available and its effectiveness. However, the scope of this research leaves room for further studies to be continued. The time limit made it difficult to access all the challenges associated with the maintenance and sustainability. Wing & Phelan (2005) in their study realised that approximately 20% of overweight individuals are successful at long-term weight loss when defined as losing at least
10% of initial body weight and maintaining the loss for at least one year. Respondents, therefore, have to be accessed over a period of at least a year in order to determine long-term weight loss as such for future findings, trend analysis could be conducted so the maintenance and sustainability of weight loss by these programmes could be determined.

This research had a high rate of educated people and as such reflects some degree of biases. Illiterates, the physically challenged and other categories of obese people can be studied if some other parameters are considered.

5.4 Recommendations

Due to the findings of the research and the conclusions drawn, the following recommendations were made. Providers of weight loss services need to put in more publicity for their respective programmes in order to increase awareness and patronage of their products and services.

Good support systems for their clients would also be an added advantage. These include motivation and encouragement, good follow up and teamwork and also to ensure their clients are satisfied with their offered services so the rate of abandonment of programme is reduced.

Service providers can also segment their products in order to cater for price sensitive customers as well as the high class too at premium charges. This is necessary because some customers give up due to the high cost of products and services.

I also recommend strategic partnerships between service providers of weight loss programs and significant others. For instance, a health shop could partner with a health centre so they can take referrals and boost their patronage and sales.

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APPENDICES

APPENDIX A

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BUSINESS DEPARTMENT OF MARKETING AND CORPORATE STRATEGY

Brief background of the study

This questionnaire is designed to obtain your views on issues related to weight loss programmes, their effects, sustainability and maintenance on users. The study is purely academic-oriented, as such, we would like to assure you that your responses would not be used for any other purpose other than those stated before. For the purposes of improving the quality of the study, we humbly request you to take your time to read and understand the items on this instrument before you respond to them. Objective responses offered will be highly appreciated.

Thank you so much for your willingness to participate in this study.

Demographic Data
(Please tick the most appropriate**)**

1. Gender of respondent: Male [ ] Female [ ] 2. Age of respondents:
   26- 35 [ ] 36- 45[ ] 46- 55[ ] 56 and above [ ]
3. Level of education completed by respondent:
   SSS [ ] Tertiary [ ] Degree [ ] Postgraduate [ ]
   Informal [ ] Other (specify) ……
4. Marital status of respondent:
   Single [ ] Married [ ]
5. Employment status of respondent
   Employed [ ] Self- employed [ ] Unemployed [ ]
   Student [ ] Retired [ ]

Awareness of weight status and weight loss programmes

6. Do you know your height? YES [ ] NO [ ]
   Please tick if yes
   140-150cm [ ] 151-160cm [ ] 161-170cm [ ] 171-180cm [ ] Above 180cm [ ] if no then not Applicable [ ]
7. Do you know your weight Yes [ ] NO [ ]
   If yes please tick
   40-60kg [ ] 61-80kg [ ] 81-100kg [ ] Above 100 [ ]
   If no then not Applicable [ ]
8. Are you happy with your weight? YES [ ] NO [ ]
9. What informs the type of food you eat?
   Affordability/cost [ ] Hunger [ ] Cravings [ ] Nutrition [ ]

10. How would you describe your level of physical activity?

Sedentary (little or no exercise) [ ]
Lightly active (household chores or short walks) [ ]
Moderately active (about 30min exercise 3 times a day) [ ]
Very active (high intensity activity with almost daily exercise) [ ]

11. Are you aware of any weight loss programme? YES[ ] NO [ ]
Gym [ ] Weight Loss Company e.g. Forever Living [ ]
Liposuction [ ] Dieting [ ]
Gym and weight loss company [ ] Gym and Dieting [ ] Gym and Liposuction [ ] Weight loss company and Liposuction [ ]
Weight Loss Company and Dieting [ ] Liposuction and dieting [ ]
Gym, weight Loss Company, Liposuction and dieting [ ]
Other specify ……

12. If you answered NO to question 8 which of the following have you tried?
Exercise on my own [ ] Joined gym [ ]
Resort to nutritional supplements [ ] Underwent weight loss surgery [ ]
Seen a weight loss consultant [ ] Dieting [ ]
None of the above [ ]

13. What influenced your decision to sign up for a weight loss programme?
Family and friends [ ] Health [ ] Self [ ]
Weight loss company agents (name company)……

14. Which of these programmes have you ever participated in?
Gym [ ] Weight loss coaching [ ]
Food supplement [ ] Liposuction [ ]
Weight loss pills [ ] Dieting [ ]
Do it myself [ ]

Effects of weight loss programmes 15. How often do you check your weight?
Daily [ ] Weekly [ ] Monthly [ ] Not often [ ]
16. Have you noticed any change? YES [ ] NO [ ] 17. How much change in weight?
2-5kg loss [ ] 6-10kg loss [ ] 11-15kg loss [ ] 16-20kg loss [ ] Above 20kg loss [ ] Not Applicable [ ]
18. Over what period did you lose the weight?
2wks-1month [ ] 2-4month [ ] 4-6mths [ ]
Above 6months [ ] Specify….....……..
19. How committed are you to your programme?
Daily [ ] Weekly [ ] Once or twice a month [ ]

Other specify…….....

20. Are you satisfied with the programme? YES [ ] NO [ ]

21. What benefits have you had since the start of the programme?
Optimal health [ ] Weight loss [ ] Youthfulness [ ] None [ ]

Challenges associated with the marketing of weight loss programmes

22. How would you describe accessibility to the programme in terms of proximity, availability of personnel and service provided?

Proximity	close [ ]	far [ ]		n/a
Availability of personnel	readily available [ ]	inconsistent [ ]	hardly available [ ]	n/a
Service delivery	good [ ]	satisfactory [ ]	bad [ ]	n/a
Others (specify)				

23. Do you have support and accountability with the chosen weight loss programme?
Yes I am supported and feel accountable to the programme [ ] No, I feel left alone and have no sense of accountability with the programme. [ ] Not applicable [ ]

24. If you answered yes to question 23 please indicate what ways you feel supported.
Great follow up system [ ] Motivation and encouragement [ ]
Team work [ ] Sense of belonging [ ]
If no then not applicable [ ]

25. Are you currently on the programme? YES [ ] NO [ ]
If not, why
Laziness [ ] Cost of participation [ ]
Proximity [ ] Other, specify…….....……
If yes then not applicable [ ]

26. Would you recommend the programme you are partaking in to another?
YES/NO
If not, give reason
Ineffective product [ ] Poor follow up [ ]
Costly [ ] if yes then not applicable [ ]

27. What lifestyle changes have you made after awareness of programme?
Conscious of your diet [ ] More active [ ] Health consciousness [ ]

28. Have you had any peculiar challenge with the programme apart from the ones addressed? Yes [ ]
No [ ]
If yes, please specify……