

**THE ASPARTAME DIET: AN INVESTIGATION OF  
CONSUMER PERCEPTIONS AND CONSUMPTION  
OF DIET SODA**

**BY**

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**THESIS**

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## **Abstract**

To find out whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. It is necessary to try and establish if these risks can and will influence the behaviour of health-conscious women and whether or not this will result in the selection of alternative beverages. I have researched particular themes which include; the relationship between female gender issues and dieting, the modern-day health-conscious woman and the food additive aspartame, therefore, highlighting the health risks that are associated with the consumption of this chemical.

I have analysed primary and secondary data throughout this research process. My secondary research involved creating an archive for content analysis. The archive was filled with peer-reviewed articles, academic journals and novels. My primary research consisted of creating an online qualitative survey which was later analysed by a method of thematic analysis.

This research will contribute towards highlighting the health-conscious woman's current perception of diet soda and the harmful risks that are associated with drinking the diet beverage.

Regardless of the harmful chemicals that are found within this diet soda beverage, the majority of females would rather limit the amount of diet soda that they consume and therefore, continue to drink this beverage instead of giving up diet soda completely. A small percentage of women will chose to ignore the health risks and therefore, choose a chemical intake over a calorie intake. However, research suggests that there is a promising amount of these 'health-conscious' women that will chose an alternative beverage over diet soda, once they have been informed about the risks that are associated with this diet soda product.

# **Chapter One: Introduction**

## **1.1 Introduction**

This thesis describes research that was undertaken to determine whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. The research is necessary because, author Bordo (Bordo, 1993) elaborates on the history of the relationship between female gender issues and dieting. Bordo puts this study into perspective as she provides a holistic explanation and therefore, introduces a guided perspective about the background and contextual information for this particular study.

This research is relevant because it follows up upon research by author Watson (Watson, 2015), who describes the modern-day health-conscious woman and the suggested dietary-related products that she would supposedly consume. This research also ties up with authors Huff & Ladou (Huff & Ladou, 2007), who describe the food additive aspartame and the dangerous side-effects that are associated with this chemical, which is found in mostly all diet soda beverages. The research is unique because, although it adds the following dimension to the work above, the rest of this chapter will look at current female consumer perceptions and associations in relation to the consumption of diet soda.

## **1.2 Research Problem**

According to the literature (Bordo, 1993) (Watson, 2015) (Huff & Ladou, 2007), we can understand the history of the relationship between female gender issues and dieting, we can relate to whom the modern-day health-conscious woman is and the products she chooses to consume. The literature also elaborates on the dangerous food additive aspartame and the risks that are associated with consuming this chemical. But according to Torrens (Torrens, 2015), we do not know why these female consumers who are supposedly educated about product ingredients in general and therefore, consider themselves as 'health-conscious' continue to consume diet soda beverages which are made up of lethal chemicals.

### **1.3 Research Paradigm**

This research report's position in terms of the nature of scientific truth is positivist and action research was conducted. The research report's position in terms of society is concrete regulation.

### **1.4 Aim of the Research**

The aim of this research is to explore the relationship between female gender issues and dieting, to describe who the modern-day health-conscious woman is and lastly to explain what aspartame is by highlighting the health risks that are associated with this food additive.

### **1.5 Research Questions**

In order to achieve the aim of the research, the following three questions have been formulated:

1. What is the relationship between female gender issues and dieting?
2. Who is the modern-day health-conscious woman?
3. What is the food additive aspartame, which is found in mostly all diet soda beverages?

### **1.6 Objectives**

More specifically the objectives of the research are to:

1. Explore the relationship between female gender issues and dieting.
2. Describe who the modern-day health-conscious woman is.
3. Explain what the food additive aspartame is by highlighting the health risks that are associated with this food additive.

## **1.7 Rationale**

This research investigates the 'health-conscious' females' current perception and associations of diet soda, which will ultimately allow us to determine whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. From this information the reader will hopefully be more aware of product content labels and product content ingredients and will therefore, be able to form an educated perspective about certain diet products, especially diet soda beverages. The reader will also gain insight into the reasoning behind the consumption of diet soda for 'health-conscious' female consumers.

## **1.8 Previous Research**

According to the literature, the relationship between female gender issues and dieting has been explored (Bordo, 1993). This relationship is a relationship that can be traced far back into time. This negative relationship is said to have stemmed from the inequality and gender issues that arose from the ideology, which suggested that women and men were unequal (Bordo, 1993).

Research suggests that women were seen as inferior in comparison towards men and therefore, women began to place a large amount of emphasis on the way men perceived them to be. The literature describes how women became infatuated with how men observed them and became obsessed with their physical appearance. The literature highlights how science and technology equipped these women with the tools they needed in order to perfect themselves (Bordo, 1993).

Once the relationship between female gender issues and dieting was explored, the literature further examines who the modern-day health-conscious woman is. The literature highlights key traits and characteristics about these women and the 'health-products' she intends to consume (Watson, 2015). The literature further examines the concept of dieting, types of diets and dietary products that are supposedly recommended for these health-conscious women (Watson, 2015).

Lastly, the literature focusses on the food additive aspartame, which is predominantly found in diet soda beverages. The literature elaborates on the history of aspartame and the dangers that are associated with consuming diet soda beverages, such as cancer, type 2 diabetes and obesity (Huff & Ladou, 2007).

## **1.9 Research Methodology**

### **1.9.1 Research Design**

The research design incorporated an online qualitative survey. The advantages of this online qualitative survey were the following: the online qualitative survey was inexpensive and speedy to manage, as well as convenient for respondents to answer in their own time and on their own terms (Bryman & Bell, 2011). The disadvantages of the online qualitative survey were the following: it was difficult to ask a lot of questions in order to generate information and another disadvantage was that there was nobody to assist the respondents while completing the online survey (Bryman & Bell, 2007).

### **1.9.2 Research Intervention**

The research intervention was incorporated into the online qualitative survey. The participants of the online qualitative survey were asked to read a paragraph about the effects that were associated with drinking diet soda. The following question asked if the participants would still consume the diet soda beverage after having just read a paragraph about the effects of the food additive aspartame.

### **1.9.3 Research Instruments**

The instrument that was used as a research tool was an online qualitative survey.

### **1.9.4 Research Process**

An online qualitative research survey was created. There were two main prerequisites for participants to complete the survey, firstly, the participant had to be a female between the ages of 18-54 years old and secondly, the participant had to drink diet soda beverages. Once the results were collected, they were further analysed and interpreted.

### **1.9.5 Analysis and Interpretation of Data**

In order to analyse and interpret the data that was collected, thematic analysis was applied.

### **1.10 Limitations of the Study**

The study's main methodical limitation was that this particular study was only based on diet soda beverages and not food products in general. Another methodical limitation of this study was that the artificial food additive aspartame was the only food additive which was concentrated upon, therefore, the study was limiting in these two respects.

The main practical limitation of this study was the population constraint. This can be said as the study was conducted on female, diet soda drinkers which made up only a small percentage of the South African population.

### **1.11 Delimitations of the Study**

The delimitation of the study was as follows: no other diet food products were analysed but only diet soda beverages, no other food additives were analysed but aspartame and there was no focus on men but rather women only.

### **1.12 Value of the Study**

This study will be of value as consumers will hopefully become more aware of and able to identify certain ingredients found within the diet products that they chose to consume, which will hopefully result in the alteration of female consumer perceptions and associations. Therefore, the value of this study will be to build awareness around the dangers of artificial sweeteners like aspartame and to remind consumers that they should continuously make an effort to inform themselves about what they consume in order to become genuinely health-conscious.

### **1.13 Outline of the Study**

Chapter 1. Introduction

Chapter 2. Literature Review

Chapter 3. Research Design and Methodology

Chapter 4. Findings, analysis and Interpretation

Chapter 5. Conclusions and Recommendations

## **Chapter Two: Literature Review**

### **2.1 Introduction**

This study argued whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. Therefore, in order to generate a thorough analysis and a complete understanding of this specific topic, the following themes and concepts were examined during this investigation.

Firstly, the history of the relationship between female gender issues and dieting amongst the westernized culture was addressed. The first chapter addressed the following concepts; the ideology that women were seen as inferior in comparison towards men, the suggested consequences that women will face because of this perceived ideology, as well as the introduction of dietary products into society. Addressing this theme provided the necessary background context to this study and therefore, allowed a more focussed and guided perspective to answer the main research question.

Secondly, this study examined the modern-day health-conscious woman, the concept of 'dieting, as well as diet products that the modern-day health-conscious woman chose to consume in order to maintain her wellbeing.

The last theme engaged in the history and development of the artificial sugar aspartame, as well as the health-risks that were associated with the consumption of this chemical, which was found in diet soda. Therefore, the perceptions, associations and the behaviour of the modern-day health-conscious female consumers were observed.

## **2.2 In Order to be a Woman: One Must Diet**

The relationship between gender issues and dieting amongst women is a relationship that can be traced far back in time. With reference to historical, scientific analysis amongst a westernized culture, women's bodies were found to be seemingly different in comparison to those of men (Howson, 2004). This historic analysis gave rise to the idea that the female body was "naturally weaker, more inferior, less stable than the male body-as different and deviant" (Howson, 2004). The thought that the female body was lesser has been embedded into the minds of society and this melancholic ideology portrays everlasting consequences for generations of women (Howson, 2004).

In the novel, titled "unbearable weight" Susan Bordo uses metaphorical comparisons to describe how the women's body is continuously 'weighed down' by men and women themselves in society. Susan Bordo introduces an interesting argument; she substantiates a thought of reasoning behind the ideology that women are inadequate in comparison to men. This idea originates from the mind of a man, as men had described their strong attraction and their obsession with women as "a moral downfall" (Bordo, 1993), which according to men, was unacceptable as they couldn't have been perceived to have or uphold any negative qualities. Therefore, at the point in time, women were seen to be dangerous and daring in the eyes of these westernized men (Bordo, 1993).

In the 1980's, the Hollywood scene became an influential platform in the lives of western women. This is where the concept of 'body maintenance' originates from and was further introduced into society (Howson, 2004). The concept of 'body maintenance' heavily influenced female perspectives that were related to their physical appearance (Howson, 2004). According to women it became imperative to look physically attractive and to be mindful about how others might have perceived them to be (Howson, 2004).

The theme of converting your body into a more desirable shape became extremely prevalent as women began to learn that they could control and alter any aspect of their body (Howson, 2004). Newly developed research and technology provided women with the necessary information that they needed to know about nutrition and exercise routines (Bordo, 1993). A large amount of emphasis was placed on health during this time, as statistics highlighted that cancer and heart disease were increasingly on the rise (Howson, 2004).

“Women are subtly coerced to embody beauty and men are encouraged to desire and possess beautiful women” (Howson, 2004), this myth has undoubtedly caused controversy in society and has led to everlasting consequences for the female population. Women had started to become infatuated with how they were perceived to be by men, as the ultimate goal at the time was to attract a man of worthy status however, this could only be achieved by physical beauty in the swayed minds of many women (Howson, 2004).

Author Alexandra Howson, suggests that large companies such as *Maybelline* and *L'Oréal* played an influential role and encouraged this obsession amongst women to continuously measure their self-worth as a result of these businesses' slogans and tag-lines (Howson, 2004). Thereafter, not only did women become obsessed with measuring their own self-worth but they became besotted with comparing themselves to other women too and embracing each other as the ultimate competition (Howson, 2004).

Susan Bordo examines the shapes of women's bodies and how their bodies have been transformed by our influential society. Bordo suggests that in the nineteenth-century, women wore fashionable corsets and they aimed to portray a figure that was curvier and accentuated 'in all the right places'. The restriction of this corset resulted in women not being able to breathe properly or eat as much as they would have liked to, as this figure-shaping garment wouldn't allow them to do so (Bordo, 1993).

According to the author Howson, the twentieth-century was marked as the emergence of the popular 'slender' figure. This is where women began to monitor their eating patterns and limit their food intake in order to remain slim. Therefore, a large emphasis was placed on food products and there was a change in the consumer-demand for healthier alternative products that would help women around the world maintain their desirable weight (Howson, 2004). The introduction of 'healthier' food and beverage alternatives is of great significance, as artificial sweeteners and dietary-related products were introduced into the world on a global platform (Howson, 2004).

It can be said, that research suggests that there is a significant amount of western-cultured women that never seem to be completely satisfied with their appearance regarding their physical weight (Bordo, 1993). Author, Roberta Pollack Seid explores the theme amongst women of never being too thin, which highlights factors which indicate that women have become completely and utterly obsessed with their body image and the concept of dieting. However, this obsession has led to devastating health-related consequences for women (Seid, 1989). This has resulted in an increasing number of women who now have a distorted body image and are prone to eating disorders such as bulimia and anorexia nervosa (Fallon et al, 1996).

This theme was relevant to the main research question as the theme contextualises the study and explores the history of the relationship between female gender issues and dieting amongst a westernized culture. Within the historic analysis of this relationship, the concept of diet products were introduced into the study and the literature suggests that there was going to be everlasting consequences for the female generation.

Therefore, after conducting historical analysis, it was necessary to further identify the modern-day health-conscious woman, modern concepts of dieting as well as modern-day diet products, which begin to generate a holistic understanding of consumer perception, associations and behaviour in relation to the consumption of diet soda.

## **2.3 She's Modern and she's Health-Conscious**

### **2.3.1 The modern-day health-conscious woman**

In modern-day society, 'to be Health-conscious' is a phrase that is frequently used and it is a concept that has developed many associations (Hasler, 2000). Research suggests that the typical modern-day, health-conscious woman is in her twenties and she is said to focus a great amount of her attention on her eating habits. The modern-day health-conscious woman is said to eat breakfast every single morning, she rewards herself with healthy snacks throughout the day and is willing to spend a large amount of money on healthier food product choices (Watson, 2015). According to research, it can be said that eating healthily has become a trend amongst the young female population who can be termed health-conscious consumers. Therefore, it is suggested that these female consumers are highly aware of the ingredients that they consume on a daily basis (Meijers, 2013).

According to author Watson (2015), it is implied that the modern-day health-conscious woman is said to question the information about products regarding their ingredients and to avoid genetically modified and processed foods. Research suggests that the health-conscious female is aware of product packaging and she generally selects products that contain a certain recognisable 'healthier choice' logo, such as, "Low-fat, Fat-free, Sugar-Free, Light or Diet". The modern-day health-conscious woman is said to be a woman that believes that a healthy lifestyle incorporates a holistic approach and therefore, includes regular physical exercises at the gym or amongst the outdoors (Watson, 2015).

The average, health-conscious female is said to look for high quality, translucent, functional products that contain key nutrients and which are easily accessible to her (Hasler, 2000). Therefore, health-conscious women are looking for healthy and convenient products that will positively help contribute towards maintaining their ideal figure and their general wellbeing (Meijers, 2013).

It can be said that the key characteristics and the specific traits of the modern-day health-conscious woman have been identified from the literature. This research suggests that the modern-day health-conscious woman would implement a restricted diet or eating plan into her lifestyle, in order to be considered health-conscious and to further increase her overall general wellbeing. Therefore, it will be necessary for this study to further investigate the concept of 'dieting' from a holistic approach.

### **2.3.2 Dieting Defined**

According to the English dictionary, "a diet can be defined as a particular selection of food, especially as designed or prescribed to improve a person's physical condition or to prevent or treat a disease" (Dictionary.com, 2015).

While on a diet plan, it is recommended that consumers should only purchase and consume selective dietary-related products, as it is suggested that these specific dietary-related products are calorie controlled and will therefore, help contribute towards weight loss or weight maintenance. It is also suggested that selecting particular food products will positively contribute towards your overall health and wellbeing, as research suggests that these particular dietary-related products contain many nutritional advantages over standardized products for the human body (Meijers, 2013).

Now that the concept of dieting has been defined, this research study will further elaborate on the three most common types of diets to date. The three common diets that will be described include the following; calorie counting, crash dieting and reverse dieting.

Calorie counting has become a huge phenomenon amongst health-conscious consumers. Calorie counting is a very interesting concept as it is particularly based on the specific calories that are contained within a product (Martin et al, 2007).

Health-conscious consumers that count calories will be involved in a process of writing down the number of calories that are contained within each product that they consume. The amounts of calories that people are allowed to consume within a day are all dependent on the specific diet plan that they are following. At the days end, calorie counters will add up all of the calories consumed and form a calculated analysis (Martin et al, 2007).

Health-conscious consumers are said to pay particular attention towards two common labels which include: reduced calorie products, which suggests that there is at least 25% fewer calories or less in the product and Low calorie products, which suggests that the product contains 40 calories or less per the serving size (Klatell, 2012).

According to the United Kingdom's National Health System, crash dieting is a process whereby very few calories are allowed to enter the human body and the main prerogative is to lose weight at a rapid speed. According to research, crash dieting is associated with negative health-effects and may be detrimental to the human body.

The concept of crash dieting is notorious for being completely unsustainable as the diet is too restrictive on the body as the majority of food groups are eliminated from the participants eating plan (National Health System, UK, 2015). Crash dieting can result in the slowing down of the metabolism, an absence of nutrients and vitamins and complete energy deficiency. Crash dieting can be said to also lead to an increase in heart disease and cholesterol as too much protein or fat is normally incorporated into these crash diets (National Health System, UK, 2015).

Another dieting marvel that is relatively new and extremely interesting is a concept known as reverse dieting. According to research, reverse dieting is the latest phenomenon amongst dieters and fitness enthusiasts (Dean, 2014). The main objective of this newly developed concept is to recover the metabolic damage caused by dieting.

Dieting is known to slow down your metabolism, which results in weight gain and it can be nearly impossible to maintain the desired goal weight once reached (Dean, 2014). Nutritionists suggest that the concept of reverse dieting should include increasing your calorie intake and decrease the amount of exercise the participant would normally do in order to maintain the newly desired weight (Dean, 2014).

According to research done by the National Institute of Diabetes and Digestive and Kidney diseases, these intense, drastic dieting concepts are infamous for being completely unsustainable, which has resulted in a trend commonly known as the yo-yo diet. Research suggests that a yo-yo diet is another term for weight cycling. The concept of weight cycling involves losing and regaining weight on a regular basis.

Yo-yo dieting is a trend that occurs in women that have entered extreme diet plans and who do not exercise on a regular basis. These specific diet plans have no sustainability or long –term maintenance plans. This type of dieting trend causes woman to increase the amount of fat around their vital abdominal organs which can lead to very ill health (National Institute of Diabetes and Digestive and Kidney Diseases, 2015).

Although research has highlighted the most common types of dieting, it is still imperative to further dissect this concept of dieting in relation to the main argument of this research report. Therefore, this study further investigates the types of diet products that the health-conscious woman would consume in order to fulfil her general wellbeing and to maintain a healthy body weight and physical appearance.

#### **2.3.4 Low-Fat, Fat-Free, Sugar-Free, Diet and Light**

According to research, products that contain the word 'diet' on them have been specifically produced for people that have medical-related issues (Khoury, 2011). The word 'diet' contained on these products will ensure consumers that the product will be absent of certain ingredients, such ingredients can include: sugar, fat or salt. These 'diet' products are usually only recommended for people who have the following health-related issues: diabetes, cholesterol or hypertension (Khoury, 2011).

Although these diet products were originally created for people with medical issues only, regular health-conscious consumers with no medical-related issues have been convinced otherwise and therefore, consume these products on a daily basis. Whether it is a trend or very effective marketing campaign, consumers are inundated with a variety of product choices in their local super markets. These products contain stickers and labels which include the following descriptions, "Low-Fat, Fat Free, Sugar-Free, Diet and Light".

According to author Torrens, low-fat products were introduced into society to meet the demands of the emergence of a new health-conscious consumer. However, these dietary products are continuing to cause controversy and much speculation on a global basis. Research suggests that these low-fat products are deemed as a marketing campaign and not a factor that will result in bettering the health of society (Torrens, 2015).

In order for the original 'high fat' products to be deemed as Low-fat or diet products, research suggests that the animal fats within the original product are replaced with vegetable oils (Torrens, 2015). However, in order to adapt the vegetable oil to the specific product, the structure of the vegetable oil has to be diversified; therefore, a process called hydrogenation takes place (Torrens, 2015).

Author Torrens further elaborates that the process of hydrogenation creates semi-solid fats in the new low-fat product which ultimately increases the Trans Fats intake for human beings. These diet products also include increased sugar by the manufacturer, as the product ultimately still needs to taste well and the texture needs to be the same as in its existing form. Therefore, according to Torrens, low-fat products contain no added benefits for health-conscious consumers.

More research suggests that manufacturers are adding hidden chemicals to these diet products; therefore, the human body finds it difficult to recognise the new hidden fats within the product which makes it harder for the human body to break-down unknown fats (Life With Greens, 2013). These processed ingredients are said to cause hormonal disturbances, weight gain and increased sugar to the products which health-conscious consumers are opting to choose as the healthier choice (Life With Greens, 2013).

This theme was relevant to the main research question as the literature tied in with highlighting an abundance of products that were perceived as 'healthy'. However, these products were said to contain chemicals, added sugars and fats in order to be consumed by the 'health-conscious' woman. Therefore, it was imperative for this study to further analyse and dissect a certain, specific chemical found within these dietary related products, especially in relation to diet soda beverages.

## **2.4 The Aspartame Diet**

Consumers in general are constantly inundated with an abundance of information relating to the nutritional values of certain food products. With evidence of consumers becoming increasingly health-conscious, there has been a large influx of dietary-related products into the market scene. Previous findings have led to suggest that health-conscious women, that partake in extreme diets and fill their bodies with diet-related products do so, in order to reap the long-term health-benefits and advantages.

However, the majority of these new diet products contain additive ingredients that have been formed as a substitute and replacement for sugar (Margarita et al, 1988). Researchers have come across a specific food additive which goes by the name of aspartame (Huff & Ladou, 2007). Aspartame is an extremely popular, artificial sugar that is added to the majority of diet-related food and beverage products. This food additive is causing much controversy, as it is said to have harmful side-effects for human beings (Huff & Ladou, 2007).

This artificial sweetener, aspartame, could be a health-conscious women's personal downfall, as this food additive could be causing the complete opposite effect for the original reason for dieting (Oaklands, 2014). These findings could shock health-conscious women who value these diet products (Huff & Ladou, 2007).

Aspartame is a white-coloured, powdered, food additive that was revealed in the year of 1961 (Huff & Ladou, 2007). This food additive was discovered by a chemist that goes by the name of James Schlatter (Huff & Ladou, 2007). Schlatter came across this white powdered substance in error while, in a scientific laboratory, testing other chemicals. The chemist, Schlatter, had immediately tasted the food additive and noted that it was extremely sweetened and had no unpleasant after taste (Margarita et al, 1988). The artificial sweetener was approved by the Food and Drug Administration (FDA) in 1981 (Huff & Ladou, 2007). The sweetener was branded

under a company named, NutraSweet (Margarita et al, 1988). Aspartame is the most studied food additive of the time as it is the most widespread ingredient as a substitute for sugar (Huff & Ladou, 2007).

According to Maher & Wurtman (1987), the item that is mostly associated with having aspartame in it, are all diet soda beverages. Aspartame is said to improve the flavour of the beverages while still containing less sugar (Maher & Wurtman, 1987). However, there have been many research studies based on this artificial sweetener and the side-effects of over consumption of this product (Maher & Wurtman, 1987). There are all sorts of side-effects that have only been recently discovered about this artificial sugar that has already been around for many years (Maher & Wurtman, 1987).

Since research has been conducted on Aspartame, researchers have identified extremely worrying health-effects that are caused by this dangerous artificial sugar (Maher & Wurtman, 1987). According to Huff & Ladou (2007), the side-effect that is the most common amongst researcher findings is cancer. Research suggests that the artificial sugar triggers certain neurons within the brain that cause the body to produce cancer cells which are extremely dangerous as these cells can lead to a life long illness (Huff & Ladou, 2007).

Nettleton et al (2009), suggests that type 2 diabetes is another side-effect that is positively associated with aspartame. Research shows that consumers that drink large amounts of diet soda were more prone to contracting type 2 diabetes (Nettleton et al, 2009). This is extremely ironic as the diet soda beverage was created purely for diabetics. However, diet soda production companies have failed to warn consumers that even though the beverage is low in calories, it still should be consumed in moderation (Nettleton et al, 2009).

According to Oaklander (2014), studies suggest that over consumption of diet soda can lead to obesity and therefore, causes consumers to gain weight. Research suggests that the chemicals within the artificial sugars can cause neurological triggers in the brain (Nettleton et al, 2009).The chemicals from the diet soda beverage alter the neurons within the brain and this can result in high sugar and fat cravings, which will ultimately lead to weight- gain and heart-disease for the consumer (Oaklander, 2014).Therefore, it can be said, that artificial sugars such as aspartame are extremely dangerous for human consumption. Researchers suggest that there are even more health risks uncovering which are related to the intake of artificial sweeteners (Huff & Ladou, 2007).

## **2.5. In Summary**

This study argued whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. Therefore, in order to generate a thorough analysis and a complete understanding of this specific topic, the following themes and concepts were examined during this investigation.

Firstly, the history of the relationship between female gender issues and dieting amongst the westernized culture was addressed. Addressing this theme provided the necessary background context to this study and therefore, allowed a more focussed and guided perspective to answer the research question.

Secondly, this study examined the modern-day health-conscious woman, the concept of 'dieting, as well as diet products that the modern-day health-conscious women chose to consume in order to maintain her healthy wellbeing.

The last theme engaged in the history and development of the artificial sugar aspartame, as well as the health-risks that were associated with the consumption of the chemical, which was found in diet soda. Therefore, the perceptions, associations and the behaviour of the modern-day health-conscious female consumers were observed.

From the literature, it can be concluded that the modern-day health-conscious female consumes diet products on a regular basis in order to maintain a healthy wellbeing. However, research suggested that these 'healthier' products contained added chemicals such as aspartame, which were associated with health-risks such as cancer, type 2 diabetes and obesity.

Therefore, primary research needed to be conducted in order to analyse the modern-day health-conscious woman's current perception, associations and behaviour in relation towards diet soda beverages. This research study needed to further investigate why these supposedly health-conscious women still chose to consume diet soda when there was an abundance of information regarding the risks associated with the beverage.

## **Chapter Three: Research Design and Methodology**

### **3.1 Research Methodology**

#### **3.1.1 Research Design**

Qualitative research can be defined as, “the collection and analysis of primarily non-numerical data, which include words, pictures and actions” (Bryman & Bell, 2011:41). It was proposed that a qualitative approach be used to identify, explore, understand and explain the social behaviour of health-conscious female consumers.

The method that was used in order to analyse and collect qualitative data was a method known as content analysis, which can be defined as, “the collection and qualitative analysis of texts and document”(Bryman & Bell, 2011:42).

Furthermore, data was collected from content documents as well as an online qualitative survey. The data was examined and analysed in order to identify certain patterns and themes which include the following: exploring the relationship between female gender issues and dieting, describing the modern-day health-conscious woman and the products she consumed daily and lastly, explaining what the food additive aspartame was and highlighting the side-effects that were associated with the chemical.

#### **3.1.2 Research Process**

An archive was created: This archive was made up of secondary data, which included: academic articles, peer-reviewed journals and online journalist sources. Once an archive had been created, an online qualitative survey was produced and further sent out. The online qualitative survey required two prerequisites before it could be answered. These prerequisites included the following; the participant had to be female and between the ages of 18 – 54 years old, as well as a diet soda drinker.

The online qualitative survey was made up of 21 questions that were aimed at generating insight into consumer perceptions, associations and behaviour in relation to the consumption of diet soda. The information was termed valid and reliable due to consistency and construct validity throughout the research process (Bryman & Bell, 2007).

### **3.1.3 Analysis and Interpretation of Data**

Once the online qualitative surveys were answered, the results were collected and analysed. The results were analysed by a technique called thematic analysis, “the goal of thematic analysis is to identify, analyse and describe patterns or themes, across the data set” (Bryman & Bell, 2011).

## **3.2 The Sample**

The research was conducted on South African, ‘health-conscious’ females that consumed diet soda on a regular basis. The study included woman that were between the ages of 18 -54 years old and these women were of multiple ethnicities.

## **Chapter Four: Findings, Analysis and Interpretation**

After having conducted an online qualitative survey, thematic analysis was used in order to analyse the results, which include the following:

### **Key Finding: 1**

In this study, it was found that 79% of the participants stated that they had previously been on a restricted diet/eating plan, that they had placed a large amount of emphasis on their weight or physical size and that one of the main reasons for consuming diet soda was due to the lesser calories found within the beverage. Therefore, this information suggested that there was a clear parallel between female gender issues and dieting specifically.

### **Key Finding: 2**

In this study, it was also found that the majority of the participants stated that they were aware of the content labels and information found in and on these diet soda beverages. The participants stated that although they didn't always make a conscious effort to read the content labels, they had said that they would definitely be able to recognise certain ingredients within the beverage.

However, in the next question, participants were asked if they knew what the food additive aspartame was, however, a lesser percentage of the participants stated that they knew what aspartame was, after having previously said that they would be able to recognise content ingredients.

These findings suggested that consumers have a false perception about diet soda beverages and therefore, there is a need to further educate consumers about content ingredients.

#### Key Finding: 3

Participants were further asked to describe, in a few words, the emotion that they felt or the urge that they had which lead them to consume a diet soda beverage. The following answers and key words surfaced numerous times: craving something sweet, hungry and wanting to be full, a healthy treat, disciplined, guilt-free soda, it tastes better than water and weight maintenance. This finding suggested that consumers associate diet soda with positive and healthy connotations.

#### Key Finding: 4

Towards the end of the online survey, the participants were asked to read a small paragraph which outlined what aspartame was and the health-risks that were associated with this food additive which was found in diet soda. However, 56% of the participants said they would continue to drink diet soda after having read this paragraph which highlighted the health-risks of consuming this additive. This finding suggested that these participants had completely undermined the effects of diet soda and felt that a paragraph on the dangers of aspartame was not persuasive enough to convince loyal diet soda drinkers to completely give up consuming the beverage.

#### Key Finding: 5

The last question asked, if the risks associated with consuming diet soda would influence these health-conscious women to rather drink alternative beverages: 49% of the participants answered yes definitely, 38% of the participants said they would limit the amount of diet soda they drank and 13% of the participants said that the risks associated with consuming the diet soda beverage didn't phase them and that they were more concerned about the calories entering their bodies in comparison to the chemicals.

## **Chapter Five: Conclusions and Recommendations**

### **5.1 In Conclusion**

This study argued whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages. In order to come to the following conclusion, the following themes were explored and analysed in relation to the research question: the relationship between female gender issues and dieting, the modern-day health-conscious woman and the food additive aspartame.

Therefore, it can be concluded that there was a convincing amount of health-conscious women that were influenced by these health-risks that were associated with drinking diet soda. However, these results also suggested that more than a third of these women that claimed to be 'health-conscious' would rather limit the amount of diet soda that they drank than completely give up drinking the beverage. Even though there was a promising amount of these health-conscious women that were influenced by the health-risks of drinking diet soda, there was still a small percentage of 'health-conscious' women who were solely concerned about their calorie intake and not their chemical intake.

It can also be said that diet soda seemed to have a very strong and loyal following and it can therefore, be termed challenging to sway the perception, associations and behaviour of consumers as there is still a fair amount of research that needs to be conducted and shared on the food additive aspartame.

## **5.2 Recommendations**

This study recommends that consumers need to be more aware of the content ingredients found within the products that they chose to consume. This study also recommends that consumers need to continuously keep themselves informed and up to date with the latest research and information about these products. This study recommends that the risks that are associated with the food additive aspartame are serious risks and that these risks cannot be taken lightly as the majority of food products that consumers consume are made up of dangerous chemicals. Therefore, consumers should be highly aware of these chemicals until we as human beings know more about the potential side-effects caused by these chemicals.

## **Appendices**

### **6.1 Appendix A**

#### **6.1.1 Alchemy Activation Proposal**

##### Research Question

Whether or not the health risks of drinking diet soda may influence health-conscious women to rather drink alternative beverages?

##### Insights

The core insights that I have gained from my research include the following:

The relationship between female gender issues and dieting

Throughout this research process I have discovered that not only can the relationship between female gender issues and dieting be traced far back in time, but, that this is an unhealthy relationship and could therefore, be a main cause and a consequence of the negative self-image that a vast number of women possess today.

I have learned that the concept of women choosing to perfect their bodies and their physical appearance is not only a phenomenon of the 21st century. Nutritional information about food products and exercise regimes became extremely popular in the early 1950's. Therefore, dietary products and their nutritional values have been present for a long time. However, I have discovered that back then consumers didn't pay much attention to the nutritional value labels nor did they understand the scientific references on the content labels of these dietary products.

I have also realized that the modern day health-conscious woman is a lady who is somewhere between the ages of 20-45 years old. The health-conscious woman attends gym on a regular basis but mainly focusses on her calorie intake. The modern day health-conscious woman focusses specifically on her calorie intake due to her busy and stressful lifestyle, where going to the gym takes up a lot of time on her daily schedule.

The modern day health-conscious woman proclaims to demand high - quality food products; she requests transparent nutritional labels and clear content information. The one significant factor that drives this health-conscious woman is convenience. The modern day health-conscious woman's main goal according is to represent an ideal body weight and size.

I have discovered that the main reason that these supposedly health-conscious women initially begin to diet and transform their lifestyles and bodies in order to improve their physical health. These women believe that the dietary products, such as diet sodas are better for your physical health and can offer them nutritional caloric advantage.

However, I have realized that these dietary products, such as diet sodas can cause a consumer's health to rapidly deteriorate after consumption. I have discovered that these diet products can be associated with harmful risks and effects. Therefore, I feel that unless you face certain health issues such as diabetes there should be no reason for these women who think they are health-conscious, to consume these harmful diet soda beverages.

The health risks that are associated with the artificial sugars which are found in diet soda beverages

Throughout this research process, I have also discovered that there are a significant amount of artificial sugars that have been introduced into the market. However, I have learned that the artificial sugar aspartame is the most common additive to diet food products. After much research, I have realized that because this additive was created by pure chance, the long term side-effects will be extremely harmful and the majority of these side-effects will remain unknown.

In the past, aspartame was said to be linked to cancer, nowadays, scientists have stipulated that this artificial sugar can also cause type two diabetes, infertility and obesity. This confirms my insights that this artificial sugar shouldn't be consumed as it is extremely dangerous and we do not know enough about the molecule composition of this food additive and therefore, therefore consuming products such as diet sodas can lead to unknown diseases

## Message and Audience

### Message

My insights suggest the following message about my study; there is evidence that artificial sugars have been around for a while and that the information regarding these artificial sugars and their associated side-effects are available for public knowledge.

However, even though the information is easily accessible and available, more and more proclaimed health-conscious female consumers are incorporating these artificial sugars into their diets by drinking diet sodas. Therefore, this would imply that no matter how bad these artificial sugars are, a significant amount of the population will still consume these products, no matter the associated dangers as long as these diet soda beverages have low or non-existent calorie content.

Therefore, I would want to know why supposedly health-conscious women would want to consume a chemical that could lead to cancer, infertility or obesity by consuming diet soda, in comparison to consuming a higher calorie beverage but remaining healthier than in the long term.

Health-conscious females need to know that by consuming artificial sugars they are being extremely unhealthy and this could have detrimental effects on their current state of health and most definitely in the long term too. These women need to understand that there is a bigger picture here and it is not about weight and size, but rather about being healthy. These health-conscious women to get educated and need to be aware of the names of artificial sugars found in diet soda and resist these artificial sweeteners.

## Audience

### Primary Audience:

My primary audience is young South African women who are between the ages of 20 and 45 years of age. These young women drink diet soda beverages on a regular basis and refer to themselves as health-conscious. These proclaim to be health-conscious and are mainly concerned about their calorie intake in order to maintain a certain weight and figure size.

### Secondary Audience:

My secondary audience would be male and female, South African members of the public, who drink diet soda and are interested in nutritional information, are socially conscious of their health and what they put into their bodies. I would also include children into this audience as children need the perfect nutritional balance.

I have chosen my primary and secondary audiences based on my opinion that these audiences will choose to read and watch what I have written and produced as I feel they will be sensitive towards this information that regards nutrition. These people are health-conscious or want to be health-conscious and therefore they will find this information relatable as it will be personal and meaningful for them.

## The Concept

“The Aspartame Diet” ; This concept encapsulates my message as I feel that more and more females have become accustomed to a lifestyle where the products that they consume contain the artificial sugar aspartame, especially with reference to diet soda beverages. These female consumers would rather consume the chemical aspartame rather than calories. Therefore, the aspartame diet is a concept that is related to low or non-existent calorie intake and harmful chemicals.

## The Execution:

For my activation, I choreographed a ballet routine with the help of a professional ballerina, Porcia Kietzmann, who currently dances for the Cape Town City Ballet. The ballet routine was choreographed at the University of Cape Town, in a dance studio.

Furthermore, I captured interesting elements of the medium of ballet through the lens of photography. I focussed on capturing movements within the dance that highlighted the underlying effects of ballet. I wanted to incorporate the strong movements and elements of the ballet routine that I thought would communicate the essence and the underlying reality of the dance.

I feel that my alchemy activation is appropriate as ballet can be used as a metaphor for my study and can therefore, be compared to diet soda. In the sense that both ballet and diet soda can be considered as physically appealing and attractive, fluid-like, classic, sophisticated, refined, dramatic and inventive on the surface.

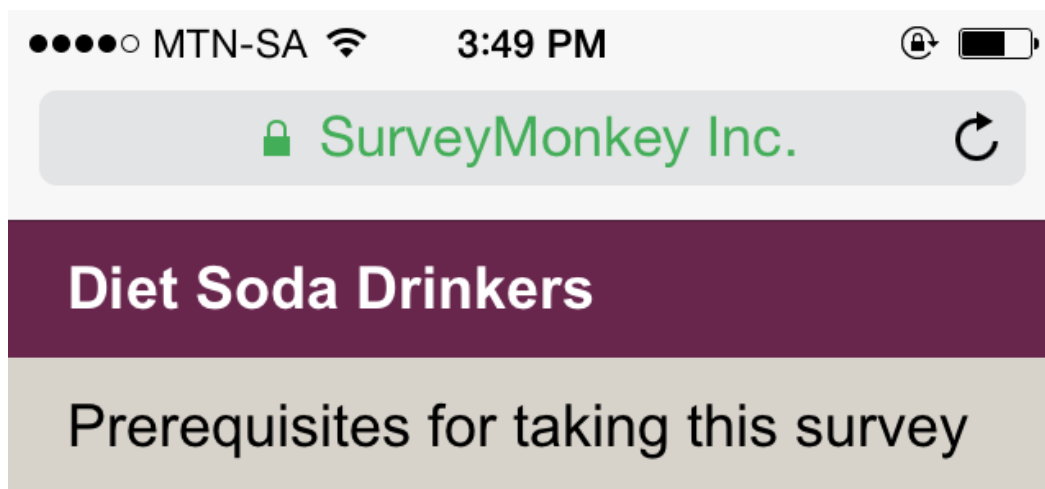
However, below the surface, both ballet and diet soda have very negative underlying effects on the human body. Therefore, one of my core research insights that I have chosen to respond to through this activation, are the harmful underlying risks that are associated with the consumption of diet soda.

Although ballet is beautiful to watch, ballerinas suffer from aching feet, numerous eating disorders and extreme pressures which have a very negative physical and mental impact on their bodies. Diet soda is also appealing to the eye and mind, however, the beverage contains chemicals that can lead to cancer, diabetes, obesity and infertility.

Once the images were captured, I had chosen significant photographs which I felt would have the most impact and relevance in order to substantiate my activation. These photographs were later developed in sepia and printed onto a canvas board in order to replicate a photographic execution, which is my alchemy activation.

## 6.2 Appendix B

### 6.2.1 Online Qualitative Research Survey



In order to take this survey, the participant should

1. Be a female
2. Drink diet sodas

#### 1. What is your age?

- ☐ 18 to 24
- ☐ 25 to 34
- ☐ 35 to 44
- ☐ 45 to 54

#### 2. Which race/ethnicity best describes you? (Please choose only



**2. Which race/ethnicity best describes you? (Please choose only one.)**

☐ Black

☐ Coloured

☐ Asian

☐ Indian

☒ White

☐ Multiple ethnicity / Other (please specify)

**3. Would you say that you are a health-conscious consumer?**

**4. Have you ever been on a restricted eating plan/ diet?**

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**4. Have you ever been on a restricted eating plan/ diet?**

**5. Do you place a significant amount of emphasis on your physical size/weight?**

**6. Do you add artificial sugar to your current diet on a regular basis? (i.e. adding sweetener to your tea or coffee)**

- ☐ Always
- ☐ Sometimes
- ☐ Never

**7. Would you rather consume**

**7. Would you rather consume artificial sweetener or 'normal' white/brown sugar?**

- ☐ Artificial sweetener only
- ☐ Brown/white sugar only
- ☐ Both artificial sugar and brown/white sugar
- ☐ None

**8. Why do you drink diet soda?**

**9. Are you familiar with the contents found in a diet soda?**

- ☐ Yes
- ☐ No
- ☐ I don't read the content label, however, I

**9. Are you familiar with the contents found in a diet soda?**

- ☐ Yes
- ☐ No
- ☐ I don't read the content label, however, I would be able to identify certain ingredient's

**10. Is one of your main reasons for drinking diet soda due to the fact that this beverage is calorie controlled? (if not, please specify otherwise)**

**11. Would you or do you drink diet soda as part of a way to maintain or lose weight?**

**11. Would you or do you drink diet soda as part of a way to maintain or lose weight?**

**12. Do you know what the additive aspartame is?**

☐

Yes

☐

No

☐

I have heard of this food additive,  
however I have no idea what it is

**13. When you think of the words 'diet soda' what first comes to mind?**

**14. In a few words describe the emotion you feel or the urge you**

**13. When you think of the words 'diet soda' what first comes to mind?**

**14. In a few words describe the emotion you feel or the urge you have which leads you to drink a diet soda beverage?**

**15. How do you feel after drinking a diet soda beverage?**

- ☐ Satisfied
- ☐ Dissatisfied
- ☐ Other (please specify)

**16. Would you say that you agree**

**16. Would you say that you crave diet soda?**

- ☐ Yes
- ☐ No
- ☐ Sometimes

**17. Please read the paragraph below, once you have done so, please tick the box**

- ☐ Aspartame is a white-coloured, powdered, food additive that was revealed in the year of 1961 (Huff & Ladou-2007). Aspartame is the most studied food additive of the time as it is the most widespread ingredient as a substitute for sugar (Huff & Ladou-2007). This food additive is most commonly found in diet soda beverages. Since research has been conducted on Aspartame; researchers have identified extremely worrying

**17. Please read the paragraph below, once you have done so, please tick the box**

- ☐ Aspartame is a white-coloured, powdered, food additive that was revealed in the year of 1961 (Huff & Ladou-2007). Aspartame is the most studied food additive of the time as it is the most widespread ingredient as a substitute for sugar (Huff & Ladou-2007). This food additive is most commonly found in diet soda beverages. Since research has been conducted on Aspartame; researchers have identified extremely worrying health-effects that are caused by this dangerous artificial sugar (Maher & Wurtman-1987).

According to Huff & Ladou (2007), the side-effect that is the most common amongst researcher findings is cancer. Research suggests that the artificial sugar triggers certain neurons within the

According to Huff & Ladou (2007), the side-effect that is the most common amongst researcher findings is cancer. Research suggests that the artificial sugar triggers certain neurons within the brain that cause the body to produce cancer cells. Aspartame has also been directly linked to other side –effects which include type 2 diabetes, obesity, weight gain and infertility.

**18. Are you now more familiar with the danger/risks of drinking diet soda beverages after having read the above paragraph?**

**19. Were you familiar with the side-effects listed above, before having read the above paragraph?**

**19. Were you familiar with the side-effects listed above, before having read the above paragraph?**

- ☐ No, I had no idea about these negative side-effects caused by drinking diet soda
- ☐ Yes, I had an idea about the negative side-effects that could occur from drinking diet soda

**20. After having read the above paragraph, will you continue to drink diet soda? (if your answer is yes, please specify why)**

**21. Would the health risks of drinking diet soda influence you to drink alternative non-diet beverages?**

**21. Would the health risks of drinking diet soda influence you to drink alternative non-diet beverages?**

- ☐ Yes, definitely
- ☐ Maybe, I could limit the amount of diet soda I consume
- ☐ No, this information doesn't phase me
- ☐ No, because I am more concerned about my calorie intake and not the chemicals entering my body

Done

---

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