

# A Systematic Review of Extant of Literature in Weight Loss Marketing

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#### Abstrak

Obesitas menjadi perhatian di seluruh dunia, di era digital saat ini banyak barang yang dipasarkan sebagai alat bantu penurunan berat badan melalui platform media sosial. Tujuan utamanya adalah untuk menganalisis mempelajari pemasaran penurunan berat badan, masalah apa yang sedang diselidiki dan apa yang akan menjadi arah topik secara global. Makalah ini menggunakan tinjauan sistematis literatur di mana 34 makalah penelitian diselidiki. 34 makalah ini dicari dari empat database yaitu; Google Scholar, Microsoft, Base, Global Health and Research gate. Temuan mengungkapkan bahwa ada empat topik yang menjadi kajian yang sering dilakukan para peneliti dari studi yang dikaji. Topik utama yang sering dibahas adalah; inisiatif pengembangan produk penurun berat badan; alat/teknologi yang digunakan dalam pemasaran penurunan berat badan; cara produk penurun berat badan dipromosikan menggunakan alat dan mekanisme yang berbeda termasuk media sosial dan platform pemasaran digital dan topik terakhir yang menarik perhatian banyak peneliti adalah penyajian fakta material yang keliru mengenai produk penurun berat badan. Temuan lebih lanjut mengungkapkan bahwa sedikit penelitian mengenai efek/dampak pemasaran olahraga terhadap kinerja organisasi dari literatur yang telah kami ulas.

Kata kunci: Pemasaran, Obesitas, Tinjauan Sistematis, Penurunan Berat Badan

# Abstract

Obesity is a concern throughout the world, in today's digital age many items are marketed as weight loss aids via social media platforms. The main purpose is to analyze studying weight loss marketing, what are the current issues investigated and what is going to be the direction of the topic globally. The paper employed a systematic review of literature in which 34 research papers were investigated. These 34 papers were searched from four databases namely; Google Scholar, Microsoft, Base, Global Health and Research gate. The findings reveal that four topics are studies frequently by the researchers from the studies reviewed. These main topics frequently covered are; the weight loss products development initiatives; the tools/technologies employed in the weight loss marketing; the way the weight loss products have been promoted using different tools and mechanism including the social media and digital marketing platforms and the last topic which attracted the attention of many researchers was on the misrepresentation of the material facts regarding the weight loss products. The findings further reveal that little has been studies regarding the effects/impact of sports marketing on organizational performance from the literature we have reviewed.

Keywords: Marketing, Obesity, Systematic Review, Weight Loss

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# 1. INTRODUCTION

Weight loss marketing refers to programs that educate individuals on the importance of losing excess body fat. Because obesity is a worldwide concern, our goal in this study is to focus on goods marketed as weight-loss aids. Through important social media platforms, the advancement of science and technology is driving society to assume that slimness is a beauty standard (Hasani-Ranjbar et al., 2009; Pittler & Ernst, 2004). As a result, numerous activities, such as weight-loss diets, physical exercise, and alternative or complementary therapies, as well as the intake of various "natural" products, the majority of which are plant-based, exist to counteract the effects of obesity (mono herbs, herbalist-prepared mixtures, teas, dietary supplements, and so on). According to a recent study on the marketing of dietary supplements at health stores in Mexico City, 40 natural weight-loss solutions containing about 75 plant species were frequently offered. Among the most popular goods were plant species of global therapeutic significance or traditional usage (Molares et al., 2012; Versporten et al., 2018).

Keeping up with the ever-changing world of diets, weight loss programs, and health may be difficult. Fat may be both good for you and bad for you. Carbohydrates have both beneficial and detrimental consequences. Fast for this period of time. That is a long fast. In any way, shape, or form, fast. Trends, celebrity endorsements, quick fixes, and wellness-based whole-lifestyle regimens are all vying for market share and credibility. Obesity and overweight represent serious public health issues due to its close link with the growth of a number of chronic and non-communicable diseases across the world. Obesity is defined by an imbalance in energy intake and expenditure, as defined by the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Obesity Society (Ard et al., 2019; Jensen et al., 2014).

The regular substitution of one or more meals with low-calorie foods is one successful weight-loss strategy that has been studied in several clinical trials. As a result, because they have comparable attrition rates to traditional dieting, meal replacement and/or lower calorie products may benefit a weight control plan (Gulati et al., 2017; Shelley, 2012). Because the obesity problem is best described as one of systematic caloric overconsumption, with snacking increasingly playing a role, consumers are becoming more aware of the importance of low calorie foods in preventing overweight, not only as an obesity treatment but also as a way to control snacking.

In this regard, the market provides a diverse selection of low-calorie snacks that can be used to supplement a healthy diet, such as cereal bars, cereal cakes, and meal replacement beverages. Meal replacement beverages, for example, are frequently consumed as part of a low-calorie diet; however, when compared to cereals, bars, or cakes, they had a lower satiety impact, less dietary modification, and higher subsequent energy consumption (Hartmann et al., 2013; Mattes, 2006). In the United States, males are more likely than females to be overweight or obese (71.3 percent). Men, on the other hand, are underrepresented in weight reduction program research, and in many commercialized weight loss programs (Pagoto et al., 2011; Robertson et al., 2014).

Males reported a desire for weight reduction programs that are personalized, stimulate physical activity, are gender-targeted, and deliver information in an intelligible manner in research examining men's preferences for weight loss programs (Egger & Mowbray, 2014; Morgan et al., 2011; Sabinsky et al., 2007). These preferences stand in stark contrast to the majority of group-based behavioral weight-control regimens, which are often dominated by female participants (Wadden & Butryn, 2003; Wolfe & Smith, 2002). This gap may assist to explain why males are less likely than women to join in weight-loss programs.

According to current figures, over two-thirds of American women are overweight or obese. As a result, the yearly spending on weight reduction products in the United States is estimated to exceed 33 billion dollars (Basch et al., 2016). According to previous study diet beverages, health clubs, commercial weight loss chains, books and DVDs on exercise and different diets, medical weight reduction programs, medicines, meals, and other products that promise to aid with weight loss are all part of the thriving weight loss business (Kornfield et al., 2015). According to the Federal Trade Commission (FTC), which is responsible for safeguarding customers from misleading marketing tactics, hundreds of weight reduction, and newspapers (Hutchesson et al., 2015; Kozak et al., 2017).

In the Western world, being overweight or obese is a frequent risk factor for a variety of chronic illnesses. In the fight against obesity, digital delivery gives people who want to lose weight and change their behavior to live a healthy life easy access to low-threshold selfservices. These services are part of the transformational service landscape, which allows for "creating uplifting adjustments and improvements in the well-being of consumer entities" (Napolitano et al., 2013; Turner-McGrievy & Tweets, 2011). Weight loss companies are typically concerned with supporting customers in reducing weight. Losing weight improves people's physical health, but it does not necessarily result in a good metamorphosis. In truth, people who successfully lose weight typically gain it back quickly (Montani et al., 2015; Williams & Plouffe, 2007). As a result, concentrating just on weight loss is insufficient in terms of transformative service.

In reality, weight reduction marketing has lately gained prominence, and experts are researching it from many angles and contexts. Despite the fact that this field of marketing is not as well-known as others, academics have begun to investigate how marketing tactics might aid in resolving the obesity problem. It is worth mentioning that marketing is practiced differently in different nations. Furthermore, the obesity epidemic is wreaking havoc on Western countries more than it does on poor countries. In this regard, it is critical to analyze how nations undertake weight loss marketing, what methodologies are employed, what research approaches are used, and the direction of future studies in the field. Accordingly, the current study realized the necessity of conducting a systematic review of the relevant literature in the area of weight loss marketing to synthesize and organized the main areas covered by researchers and how these studies examined such issues.

# 2. METHODS

This study use systematic literature review, the use of systematic reviews is critical in seeking knowledge expansion and assessing academic success in any field of study (Hesse-Biber, 2010). A systematic review of the literature not only provides insight into the progress made in a certain field of study, but it can also be used to discover gaps in the body of knowledge and build on what is already known (Wilkie & Moore, 2004). Previous researchers discovered that completing a systematic evaluation of literature aids in comprehending theoretical comprehension, methodological variety, and the dithe rection of research study in an area of study (Astell et al., 2013; Ghosh, 2009; Ivanova et al., 2019). One of the most effective methods to position a field's academic environment is to review refereed journal publications (Amin & Nagy, 2009). Although this strategy takes time since it often entails the collecting and analysis of large amounts of data, it is critical for assessing a discipline's success as well as directing future research in terms of topical, theoretical, and methodological trends.

The review was undertaken by Mzumbe University Dar es Salaam Campus Collage in Tanzania's Dar es Salaam, and databases such as Google Scholar, Microsoft, Base, and Research Gate were used to find relevant papers for this study. Two extremely qualified college librarians conducted the search. The datasets above contain a total of 165 published investigations from 2010 to 2021. Google Scholar has the greatest number of articles, followed by Research Gate, Microsoft, and, shockingly, only a few from the Base database. After careful consideration, just 45 papers appeared to be relevant to our inquiry. The great majority of study was conducted in the Middle East, Far East, Latin America, Eastern Europe, and a few African countries. The study also found that, despite the fact that sport is popular in Africa and that outdoor billboards advertising marketing and sponsorship help the economy, African academics do not invest extensively in outdoor billboards promoting marketing research.

#### 3. RESULTS AND DISCUSSIONS

#### Result

The findings for this study are organized in six major sections namely; number of published articles per databases, authorship characteristics, study themes and viewpoints, research methodologies adopted by the researchers and area for future research direction. Although the scope of this study is limited to journal papers published between 2010 and 2021, results are given in relation to studies published prior to the time period under consideration, where appropriate.

#### The Number of Publications per Databases

As explained above, this analysis is based on six databases namely; Google scholar, Base, Global Health, Researchgate and Microsoft Academic, Summons for articles published between 2010 -2021 with scholars/researchers from developing countries. A total of 124 items were searched using the criteria that they be publications on weight loss marketing from all over the world. After screening them the number of article published reduced to only 60 articles. This is an indicator that either weight loss marketing is not an area where researchers want to investigate or the area of study is not familiar in many parts of the universe. Figure 1 indicates where the articles were taken from.

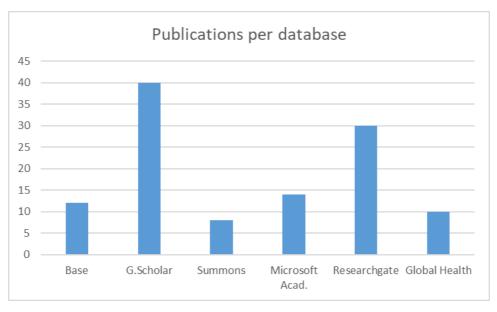


Figure 1. Publications Database

Base on Figure 1, majority of the papers/articles were obtained from Google Scholar database in which 40 articles relevant to the weight loss marketing were searched. This was closely followed by the Reserachgate that had 30 articles, Microsoft academic had 14 articles, Global Health 10 articles and Summons 8 articles. In total 124 articles were reviewed and almost half of the articles were not relevant to our investigation. In this study only articles that meet the criteria mentioned above are the only included.

#### Different Themes Covered by Researchers from 2010-2021

The articles analyzed in this study can be grouped into development of weight loss products and the materials used to produce the products, the effectiveness of the different herbal trees in reducing obesity, application of the mobile technologies in controlling obesity, advertisement of weight loss products, the impacts of advertisement on the weight loss for the population and analysis of the deceptive advertisements on weight loss.

Regarding the development of weight loss products, a good number of studies have been conducted and mostly in the USA. According to previous study the successful weight loss alternatives in the treatment of overweight and obesity include nutritional treatments, changing physical activity, behavioral approaches, medication, surgery, and a combination of these tactics (Swinburn et al., 2004). The first-line of therapy for obesity control has the lowest risk and consists of lifestyle modifications such as food, exercise, and behavioral modification. Pharmacotherapy is typically advised as a second line of treatment for obesity when lifestyle changes are insufficient in causing substantial weight reduction. The study by other study, revealed that there are caffeine substances in some of the weight loss products (Park et al., 2011). They have been widely used in recent decades due to their low cost and lack of hazardous side effects when compared to several chemically manufactured medications (Eisenhauer et al., 2020; Wymer, 2011). The World Health Organization (WHO) estimates that 80 percent of the world's population presently uses herbal medicine for some aspect of primary health care. Many Complementary and Alternative Medicine (CAM) therapies used in various countries include plant-based nutritional supplements that can help people lose weight (French & Russell-Bennett, 2015; Rundle-Thiele et al., 2019).

Several scholars have published substantially on the tools/technologies involved in weight and obesity control. The study done by previous study demonstrated the usage of mobile (Mehmet et al., 2020). The studies conducted found that the technologies application in the weight loss marketing has the potential to be beneficial, as well as accepting that programs must be given in ways that are consistent with existing life (Andreasen, 2002; Dibb, 2017). Technology application to engage people in the weight loss programs has massive benefits to the practicing social marketers. The facilitation of program customization to effectively meets the human needs, efficient delivery of the programs to the targeted people, delivering the programs at the time and place and ability to calculate one's efforts in the weight loss initiatives (Rivera et al., 2016; Sutton & Redman, 2016). These advantages assist social marketers in developing and implementing programs that are more closely linked with social marketing objectives (Adegboye & Linne, 2013; Kubacki & Rundle-Thiele, 2017). The use of gadgets, or simply technology, in the entire process of treating obesity has aided consumers in understanding the programs meant to achieve this goal. Other studies conducted studies in diverse time periods and scenarios that proved smart gadgets are on the approach of becoming ubiquitous (Raghupathi & Fogel, 2013; Yan & Harrington, 2020).

Another study reported that in "the United States, the Federal Trade Commission (FTC) regulates advertising associated with dietary supplements, which now exceed \$40 billion in annual sales (Avery et al., 2013; Besson et al., 2020). Moreover, one in every two people takes at least one supplement, and that figure appears to remain constant. The business spends more than \$900 million per year on advertising to attract customers, and upwards of 90,000 supplements are available for purchase (Abdullah & Zakaria, 2013; Amelia et al., 2019; Rundle-Thiele et al., 2019). Companies frequently overstate the impact of their products in order to obtain a competitive edge, promising stellar—and usually unsubstantiated—results. Deceptive assertions prompt the FTC to issue warnings and, if necessary, file cases in federal district courts (Milenkova & Lendzhova, 2021; Ulya, 2018). The FTC, like the FDA, posts news releases concerning legal actions on its website, allowing journalists who check the site to share that information with their own audiences."

### Methods Used

Regarding the methods used in the analyzed studies in investigating the extant of literature in the area of weight loss marketing, it can be summarized that, majority of the 33

analyzed research publications employed qualitative approach. This is to say many of the studies employed systematic review of literature and contents analysis. Very few articles have used quantitative analysis and more precise the multivariate analysis. The study conducted regarding "Plant extracts with appetite suppressing properties for body weight control: A systematic review of double blind randomized controlled clinical trials" is an example of the studies which employed qualitative research designs (Suratni et al., 2022). Another study employed a systematic review of literature to study the use of digital devices to help people lose weight (Fayomi et al., 2019). Case study design was also a methodology that attracted the attention of many researchers in our analysis.

Descriptive analysis appears to be the best way for evaluating quantitative research, with fundamental statistics such as frequency distributions and measures of central tendency dominating data analysis approaches. Few research have gone so far as to examine the impact of weight loss marketing on product performance using quantitative data analysis tools such as regression and correlation (Bersani et al., 2015; Kaplan et al., 2012). Other less widely used quantitative analytical processes include analysis of variance, analysis of covariance, multivariate analysis of variance, rank analysis of covariance, t-test, and factor analysis. Some papers used a variety of quantitative analytical approaches, while others only used one. Again, the interview approach seemed to be a good choice for data collection, especially in qualitative studies. They also suggest that researchers and practitioners have tackled the challenge of determining the effectiveness of weight loss marketing on organizational performance. We can simply say the majority of studies regarding weight loss marketing have been conducted in the US and this is understood from many of the findings analyzed that around two third of the entire population is facing obesity and over weight problem. Also, that the market for weight loss products is in excess of 40 Billion in financial calendar. This market is huge and there is no surprise as to why many researchers are putting their resources in the area.

#### Discussion

The Systematic Review on literature in the area of weight loss marketing in developing all-round the globe reveal that, there is a serious shortage of studies in this area. The shortage of papers published in this area of study is a justification that more and more researchers are either losing interests in researching this area or the relevance of the topic cannot be justified. This is proved by number of papers published between 2010 and 2021 in of which majority of the papers were published in the USA. In this investigation only 135 articles were published from 2010 to 2021 by researchers in the five databases namely, Google Scholar, Base, Core, Global Health, Summons, And Microsoft Academic & Research gate. From 135 articles collected for this study, only 34 qualified in this analysis after taking out

It is worth mentioning the fact that, the reviewed papers in our analysis have addressed various issues relating to weight loss marketing from different angles of the planet. For example, a good number of studies have investigated the development of weight loss relating products designed to help people lose weight. From this analysis we have seen how researchers have investigated different products that are used as the means to suppress the apatite thereby reducing the amount. The study conducted by revealed that nutritional treatment has helped many people to successfully reduce weight and obesity in the USA (Denham, 2021; Lange, 2013; Swallehe, 2021). The consumption of nutritional substances is an alternative means in treating obesity apart from changing physical exercises, changing of people's life styles especially eating behavior, medication, surgery and combination of other tactics. Other researchers such found that, there is a good number of weight control products that are made of caffeine (Miller & Lellis, 2015). This is to say the products relating to the

weight control and obesity management are made of different substances including caffeine. Herbal remedies have shown to be effective in the treatment of both minor and serious health issues. They have been widely used in recent decades due to their low cost and lack of hazardous side effects when compared to several chemically manufactured medications (Dwyer et al., 2018; Manson & Bassuk, 2018).

Several researchers have published extensively on the tools/technologies used in weight and obesity management. According to previous study the use of mobile technology has been used to assist in the entire process control and, eventually, management of obesity, which is recognized as a global risk (Milenkova & Lendzhova, 2021). Social marketing is a dynamic and ever-changing profession that is constantly seeking for new methods to improve the delivery and effectiveness of its programs (Dibb, 2017; Mehmet et al., 2020). This involves considering new technologies that have the potential to be useful, as well as understanding that programs must be delivered in ways that are consistent with current living.

Another intriguing topic was the promotion of weight-loss products through the use of various marketing communication methods. According to the research conducted by <sup>(17)</sup> in their well-known work "Promoting Weight Reduction Methods in Parenting Magazines: Implications for Women," there have been several papers published on how magazines are used to market the contents of weight reduction programs (Andreasen, 2002; Rivera et al., 2016; Sutton & Redman, 2016). In the first instance, the researchers discovered that information on post-delivery weight reduction was well known. One out of every four publications included a weight-loss article. However, only around half of the articles listed the author's qualifications, putting the reader in the dark about whether the author was a competent authority on the subject. Social media and digital marketing platforms have also used as the means of creating awareness and competitive advantage (Adegboye & Linne, 2013; Kubacki & Rundle-Thiele, 2017).

Another group of researchers investigated the misrepresentation of marketing information regarding weight loss. Another study reported that in the United States, the Federal Trade Commission (FTC) regulates advertising associated with dietary supplements, which now exceed \$40 billion in annual sales (Bersani et al., 2015). More over one out of every two persons consumes at least one supplement, and this ratio appears to be stable.

Other researchers investigated different areas of the billboards weight loss marketing using different methodologies (Kaplan et al., 2012; Lange, 2013). It was not possible to bring all of them here but we have presented these researchers and what they have investigated above. In the conclusion, it can be stated that the researchers' interest to explore weight loss marketing is dwindling, since just a few studies have been published in this field, and the bulk of those few examples found have been undertaken in the United States. This is to argue that either the popularity of weight loss marketing as a technique of raising awareness is declining, or the advancement of technology or science has permitted the employment of less expensive but more successful methods of promoting weight reduction goods (Manson & Bassuk, 2018; Miller & Lellis, 2015). In all of the publications evaluated, not a single research looked into the influence of weight loss marketing advertising on building a competitive edge.

The current study, like every review study, is hampered by a variety of flaws. For example we employed a systematic review in this study, thus future studies should undertake meta-analyses of weight loss marketing in developing nations. It is also said that weight marketing is a growing trend, particularly in developing nations, thus future researchers should undertake studies utilizing more powerful statistical data analysis techniques. This is because the bulk of the research examined did not go beyond descriptive and systematic review of literature. Also that, this study is an eye opener to the researchers that, majority of the studies reviewed were undertaken either in the US or in another part of the North American Continent. Studies on obesity and weight loss marketing can also be conducted in other parts of the world including developing countries. The over weight problem is a globe problem which can be eliminated through joint research studies especially in the area of weight loss marketing. The marketing information should be shared globally as the means of the means of creating awareness of the development of the sector and discoveries of the modern means of solving the obesity issue while generating reasonable profits.

# 4. CONCLUSION

It can be concluded that, the research into weight loss is on diminishing end as very researchers are investigating issues in this area. This is justified by number of study obtained from five different databases. The fact that, there not studies which explain the impact of weight loss marketing on organizational performance is an indication either the relevance of the subject is diminishing or the focus of researchers has been shifted from weight loss marketing. Majority of studies conducted/reviewed were conducted in the US leaving the other part of the world with very few studies.

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