Healthy Food Products: Testing the Impact of

Ad Type and Content Format on Consumers' Purchase Intention

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ABSTRACT

The promotion of healthy food products through social media has increased significantly in recent years. While previous studies have examined the effect of Brand-Generated Content (BGC) and User-Generated Content (UGC) on purchase intention, little is known about the effectiveness of Employee-Generated Content (EGC). This study examined the extent to which ad type and content format influence consumers' purchase intention regarding high-protein food products. To examine this, a 3 × 2 between-subjects experiment was conducted among 207 participants, where each participant was randomly exposed to one of six fictitious social media posts. The results of a two-way ANOVA showed a significant main effect of ad type. However, no significant effect was found for content format, neither an interaction effect between the two independent variables, ad type and content format. These findings suggest that, for high protein food products, the source of the message plays a more significant role than the way the message is delivered. The study highlights the convincing power of EGC and offers practical guidance for companies operating in the healthy food industry. Furthermore, it provides a foundation for future research seeking to further examine the relationship between message source, message format, and consumer decision-making.

KEYWORDS: *Brand-Generated Content, User-Generated Conten, Employee-Generated Content, Storytelling, Healthy Food Advertising*

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1. Introduction

Imagine scrolling through your social media feed and coming across a post from the CEO of a new healthy food brand. He shares his personal motivation behind developing a high protein shake and explains why existing products were lacking. With no explicit sales talk, the message feels authentic and credible. This scenario illustrates the potential power of Employee-Generated Content (EGC) in influencing consumer behaviour on social media.

There has been a shift in the way brands communicate as social media is increasingly used for marketing purposes. Whereas before, products were most frequently promoted directly from the company (BGC), nowadays products are commonly promoted through stories from the user (UGC) or even the employees (EGC). Stories from the employee (EGC) are relatively new in this field. EGC combines the professionalism of BGC with the authenticity of UGC, making it possible to reach consumers in a credible way (Saleem & Hawkins, 2021). This content presents by employees is therefore becoming more common, as it is more credible to consumers than traditional brand advertisements (Yan et al., 2021).

Besides the source type of an ad, the way the content is presented has an important role in how consumers perceive a message. A message can be conveyed in a way that consists mainly of arguments, facts and explanations, as well as by telling a story to create lasting emotional connection. Therefore, besides analysing the source of an ad, this study additionally analysed the way the content is conveyed.

These two concepts are examined within the context of healthy eating. Consumers' growing interest in healthy eating and the impact of food choices on their health has led to an increased demand for products advertised as "healthy" (Cuesta-Valiño et al., 2020, p. 1). This is therefore why you increasingly encounter healthy food on social media in various forms and why this research consequently focuses specifically on it.

While there has already been much research on UGC, BGC, informational content and storytelling content, little is known about EGC until now. As well as there being a gap in the literature regarding EGC, there is a gap in the literature on whether the combination of source and content affects consumer behaviour. In addition, there is limited knowledge about the effectiveness of different forms and content styles of ads within the context of health and nutrition, despite that, as mentioned above, healthy eating is becoming an increasingly important aspect of everyday life. It is therefore essential to understand how different ad types and content formats affect consumers, as they can influence consumer behaviour by increasing purchase intention (Vukmirovic, 2015, p. 1, Duarte et al., 2021, p. 9, Cuesta-Valiño et al., 2020, p. 14).

In addition to contributing to the existing academic literature, this study provides additional insights for both businesses and consumers. For brands in the food industry, it offers insight into how to design more effective ads that match consumer preferences. For consumers, this research sheds

light on how different types of ads influence their decision-making so that they can make more informed choices when it comes to purchasing healthy food products.

Accordingly, this research contributes to both academic and societal relevance. On the one hand, it makes an academic contribution by providing insights into the influence of different forms of social media content on consumer behaviour. On the other hand, it provides practical tools for companies in the food industry to develop more effective communication strategies.

Therefore, the central research question in this study is: 'To what extent do the ad type (brand-generated content / user-generated content / employee-generated content) and content format (informative / storytelling) influence the purchase intention of healthy food products?'. To answer this research question, a 3 × 2 between-subjects experiment was set up. Six conditions were created which consisted of a combination of the two independent variables, ad type and content format. Within each condition, the dependent variable, purchase intention, was then measured.

1.1 Structure of the thesis

This thesis is composed of five chapters: Introduction, Theoretical Framework, Methods, Results and Discussion and Conclusion. Chapter 1 provides an introduction to the study, which presents the research problem, relevance and central research question. Chapter 2 contains the theoretical framework, which reviews the relevant literature. Concepts such as purchase intention, healthy food ads, ad types (BGC / UGC / EGC) and content forms (informative / storytelling) are discussed. Chapter 3 describes the methodology used in the study. It describes the research design, sampling strategy, materials, operationalisation of variables and procedures. Furthermore, this chapter discusses the validity and reliability of the study and data analysis. Chapter 4 presents the results of the study. It includes data preparation, descriptive statistics, reliability analyses and the results of a two-way ANOVA. Chapter 5 discusses the findings which are compared with the literature from chapter 2. It also discusses implications, limitations and directions for future research. The chapter concludes with a reflection on the relevance and generalisability of the study and a summary answer to the research question. Lastly, the appendices include the stimuli used in the experiment, the pre-test and survey materials, as well as SPSS output tables relevant to the analysis and the AI declaration.

2. Theoretical Framework

This section introduces the reader to the existing knowledge in the field by defining the key concepts and relevant theories of this thesis. First, the dependent variable Purchase Intention will be discussed, then Healthy Food will be addressed, lastly the two independent variables Ad Type and Content Format will be addressed.

2.1 Purchase intention

Purchase intention will be examined in this study as an important dependent outcome variable. Measuring purchase intention therefore provides insight into how effective different ad types and content formats are in influencing consumer behaviour. As a widely used measure in marketing research, purchase intention helps explain how ads influence perceptions, attitudes and buying behaviour of consumers. The next section further defines purchase interion.

Dodds and Grewal (1991) use 'willingness to buy' as a proxy for purchase intention. This willingness to buy is directly influenced by perceived value (p. 308). Dodds and Grewal (1991) argue that willingness to buy represents a consumer's overall evaluation of a product and his potential decision to buy (p. 317). In addition, Ariff (2014) indicates that purchase intention is seen as an important predictor of actual buying behaviour, especially for food. According to him, it is the first step in generating product demand. Consumers with buying intention are more likely to actually buy something (p. 379).

2.2 Healthy Food Advertisements

Healthy eating is defined as foods that contribute to a balanced diet and provide health benefits (Duarte et al., 2021, pp. 4-5). The promotion of healthy food is an important part of contemporary marketing strategies. This is because consumers are becoming increasingly aware of their food choices and their impact on their health, which stimulates their demand for healthy products (Cuesta-Valiño et al., 2020, p. 1). Food advertisements play a crucial role here, as they influence consumer behaviour and can increase purchase intention (Vukmirovic, 2015, p. 1, Duarte et al., 2021, p. 412, Cuesta-Valiño et al., 2020, p. 14).

Several studies address food advertising and purchase behaviour. According to Vukmirovic's (2015) research, there is a positive association between food advertisements and purchase behaviour (p. 6). This is explained by the way advertisements make consumers focus on the attractive aspects of food, such as health claims, taste and social acceptance. Therefore, according to Vukmirovic's (2015), most consumers are open to services or programs designed to help them make healthy food choices (p. 18).

In addition, Duarte et al. (2021) similarly show in their study that products with health claims increase purchase intention (p. 412). This is because consumers associate health claims with higher product quality and nutritional value, leading to a more positive opinion of the product (Duarte et al., 2021, p. 412). Indeed, Duarte et al. (2021) stated that consumers tend to overgeneralize the health effect of the claim and believe that the product is generally healthy even if only one specific aspect is mentioned (408).

Cuesta-Valiño et al. (2020) examine how consumers perceive healthy food advertising through social media, using Ducoffe's Advertising Value Model (p. 3). This model explains the perceived value of advertisements based on four factors: informational value, entertainment, credibility and irritation. The study shows that credibility and informative content determine the effectiveness of healthy food ads. When these elements are used in a convincing way, they reinforce consumers' positive attitudes, leading to stronger consumption intention and, ultimately, actual purchase behaviour (Cuesta-Valiño et al. 2020, p. 14).

While advertisements are a powerful tool to promote healthy food consumption, there are also challenges. A key barrier is that healthy foods are often perceived as less attractive or less tasty compared to unhealthy alternatives (Vukmirovic, 2015, p. 18). Consumers may perceive healthy food as lacking indulgence, making it harder for advertisers to convince them to choose these products over less nutritious options. Nestorowicz (2016) therefore concludes that to make marketing communications in the healthy food market more effective, consumers must first and foremost be provided with reliable information, considering their current level of knowledge and communication skills (p. 533).

In summary, therefore, food advertising plays a crucial role in shaping consumers' attitudes and purchase intention towards healthy food products. This study will further investigate how ad type and content format influence consumers' responses to healthy food ads.

2.3 Advertisement Type

In this study, advertisement type refers to the source of a message. In this thesis, three types of advertising sources are distinguished: Brand-Generated Content (BGC), User-Generated Content (UGC) and Employee-Generated Content (EGC).

2.3.1 Brand-Generated Content (BGC)

Brand-generated content (BGC) refers to content created and distributed by companies (Tyrväinen et al., 2023, Ding et al., 2014, Sawaftah et al., 2021). Consequently, BGC is therefore fully in control of the brand (Sawaftah et al., 2021, p. 3).

BGC is used for various objectives, such as product promotion, relationship building and gaining strategic insights. One of its primary purposes is to promote products by informing consumers about specific features and advantages. The goal is to persuade potential buyers by clearly communicating the benefits and value of what the brand offers (Ding et al., 2014, p. 1786). In addition, BGC can be used to create a sense of community and connection with customers. Through social interactions and conversational content, brands can try to build loyalty and engagement (Ding et al., 2014, p. 1785). Lastly, BGC is important to understand their public image, track responses to ads and evaluating the overall performance of brand messaging (Soylemez, 2021, p. 458).

Although BGC is an essential part of a marketing strategy, it is often viewed with scepticism. Mayrhofer et al. (2019) therefore argue that consumers are aware that BGC comes from a commercial source, and this in turn can lead to persuasion knowledge. This means that consumers realize that the content is intended to persuade. Sometimes this can activate defence mechanisms, such as thinking critically about the message (p. 179). On the contrary, Cheng and Khan (2017) investigated consumer trust in the food sector and found that consumers find BGC more trustworthy than UGC, which is discussed later in this study. This is because consumers indicate that companies have more expertise and product knowledge (p. 46). Cheng and Khan (2017) did indicate that authentic and less commercial BGC, such as products in a natural setting, increase the likelihood of purchase. Therefore, visuality always plays a part in this. Pack shots are therefore seen as less credible than contextual photos, such as pictures at a breakfast table (p. 46).

2.3.2 User-Generated Content (UGC)

User-Generated Content (UGC) is defined by several articles as branded content created by users rather than by the company or brand itself (Sawaftah et al., 2021, p. 3, Soylemez, 2021, p. 457). This content can take many forms, including text, images, audio or video, and is usually shared publicly through online platforms (Sawaftah et al., 2021, p. 10). According to Tyrväinen et al. (2023), UGC is characterised by authenticity, reliability and the perception that it is produced without direct influence or interests of brands (p. 7).

UGC is considered very valuable for several reasons. To begin with, it is considered valuable because of the reliability and credibility it conveys (Sawaftah et al., 2021, p. 3, Tyrväinen et al., 2023, p. 7). Consumers perceive UGC as more trustworthy than BGC because it comes from other users with no commercial interest. As a result, UGC inspires more trust and has a greater positive impact on consumer behaviour (Mayrhofer et al., 2019, p. 166., Tyrväinen et al., 2023, p. 22). In addition, the authenticity of UGC makes it more persuasive as well. This is because users share experiences without an explicit commercial message. As a result, consumers become less sceptical (Sawaftah et al., 2021, p. 3., Mayrhofer et al., 2019, p. 179).

Moreover, UGC is less likely to activate persuasion knowledge (Mayrhofer et al., 2019, pp. 179-180). Mayrhofer et al. (2019) show in their research that persuasion knowledge refers to how a consumer understands persuasion tactics and knows how to deal with persuasive attempts. It is a concept that helps explain how people respond to marketing and advertising messages. leading to more positive attitudes and greater brand loyalty (Mayrhofer et al., 2019, p. 170).

In addition, UGC strengthens the bond between consumers and brands. Sharing authentic experiences and stories creates a sense of community and can encourage repeat purchases (Soylemez, 2021, p. 457). Sawaftah et al. (2021) further indicate that UGC has both inspirational (hedonic) value and practical (utilitarian) value (p. 2). The inspirational value provides consumers with pleasure and the practical value motivates them to take action, such as buying a product or sharing their own content. This dual nature makes it effective in engaging customers and motivating them, whether that is making a purchase or contributing their own content (Sawaftah et al., 2021, p. 2).

Furthermore, UGC provides practical advantages for brands. It is cost-effective and generates valuable feedback on products and services. (Mayrhofer et al., 2019, Sawaftah et al., 2021). Sawaftah et al. (2021) therefore indicate that UGC offers several perspectives that help potential customers make informed choices (p. 10). Through this active participation, companies can improve their products and increase brand awareness. Finally, UGC contributes to brand defence. Consumers who feel emotionally connected by UGC are more likely to publicly support and defend a brand (Sawaftah et al., 2021, p. 10).

Multiple studies have therefore shown that UGC directly contributes to higher purchase intention (Bahtar & Muda, 2016, Demba et al., 2022, Mayrhofer et al., 2019). According to Bahtar and Muda (2016), UGC is perceived as useful and credible, which positively influences consumers' attitude towards the content and ultimately leads to higher purchase intention. An important factor here is brand trust. Demba et al. (2022) show that consumers who trust a brand are more likely to follow recommendations from other users. UGC plays an important role in this as it contributes to information quality and source reliability, leading to a more positive attitude and a higher likelihood of purchase intention.

2.3.3 Employee-generated content (EGC)

It is not only consumers or brands that post about products, but also increasingly employees themselves. This is referred to as employee-generated content (EGC). EGC refers to brand-related content that employees share on their own initiative through their personal social media channels (Saleem & Hawkins, 2021, p. 820). These employees are also called employee content creators and thus act as informal brand ambassadors.

Several studies showed that EGC has significant value for companies, both in terms of consumer behaviour and internal motivation (Saleem & Hawkins, 2021, p. 820, Yan et al., 2021, p.

11). For example, Yan et al. (2021) argue that in online user communities, EGC acts as a powerful tool for product support and knowledge sharing. In addition, EGC acts as a dynamic knowledge archive, where users can continuously find new information about products and services (p. 2). Furthermore, Yan et al. (2021) argue that when employees post EGC, they also gather valuable insights into users' questions and needs through their contributions, which helps companies in product development and marketing (p. 4). Besides the fact that it can provide additional knowledge within the community, Yan et al. (2021) also argue that EGC acts as an engine for reciprocity within online communities. By this they mean that when users read content from collaborators, they feel motivated to contribute themselves.

Similarly, Saleem and Hawkins (2021) address the values of EGC in their study and argue that EGC is a cost-conscious alternative to traditional marketing strategies. Because, by encouraging employees to share brand-related content through their personal networks, companies increase their visibility on social media without large advertising budgets. Employees thereby become a valuable and authentic form of internal influencers (p. 819). In addition, according to Saleem and Hawkins (2021), EGC influences consumer behaviour directly. Employees who share content are often seen as knowledgeable and loyal. This reinforces their expert status and the credibility of the content. It increases consumer trust, purchase intention and positive word-of-mouth (p. 826). Saleem and Hawkins (2021) indicate that, unlike BGC, consumers perceive EGC as less commercial and more authentic, further enhancing the effect.

EGC is consequently a valuable and emerging form of brand communication in which employees voluntarily share content about their organisation through their personal social media channels. EGC is often perceived by consumers as more credible and less commercial than traditional brand communication, leading to greater trust, and higher purchase intent.

Therefore, based on these findings, the following hypotheses have been formulated:

H1: The advertisement type (Brand-Generated Content vs. User-Generated Content vs Employee-Generated Content) will have an effect on purchase intention.

H1a: Advertisements using User-Generated Content (UGC) or Employee-Generated Content (EGC) will result in higher purchase intention than those using Brand-Generated Content (BGC).

H1b: Advertisements using Employee-Generated Content (EGC) will result in higher purchase intention than those using User-Generated Content (UGC).

As a summary, three main forms of ad types can be distinguished in this thesis: Brand-Generated Content (BGC), User-Generated Content (UGC) and Employee-Generated Content (EGC). In conclusion, this chapter shows that content that does not come directly from the brand itself, such as UGC and EGC, is often perceived as more authentic and trustworthy, which may ultimately lead to

a stronger purchase intention than traditional brand communication.

2.4 Content Format

Besides the type of source of an ad, the way the content is presented has a significant role in how consumers perceive a message as well. This study therefore distinguishes between two commonly used formats: informative and storytelling. Whereas informative ads focus on conveying factual product information and rational arguments, storytelling ads, on the contrary, deploy emotion and narrative to engage consumers. The following paragraphs explain both formats, including their characteristics and influence on consumer behaviour.

2.4.1 Informative

"Advertisements are considered informative when a commercial message is conveyed through arguments, facts and explanations" (Stubb, 2018, p. 55). Its main purpose is to provide valuable, factual information and appeal to the audience's rational thought process (Stubb, 2018, p. 55).

Research has shown that informative ads can certainly be valuable (Zebregs et al., 2014, pp. 286-288). For instance, Zebregs et al. (2014) argue that statistical evidence has a stronger influence on beliefs and attitudes (pp. 286-288). If a company wants to influence someone's beliefs or attitudes, facts are very effective (Zebregs et al., 2014, pp. 286-288). In addition, informative advertisements can serve as a source of product knowledge for information seekers (Kang et al., 2020). The results from the study by Zebregs et al. (2014) suggest that no single type of evidence is always the most convincing. It depends on which outcome variable you are trying to influence (pp. 286-288).

Although informative ads can therefore be valuable in conveying factual information, they also have limitations that can reduce their effectiveness. Informative ads are often perceived as less engaging because they emphasise facts and logical arguments, and therefore lack emotional connection (Chan, 1996, p. 15., Stubb, 2018, p. 60). This makes it difficult to hold the audience's attention, leading to a lower impact of the advertisement.

While informative ads can be useful for conveying factual information, their lack of emotional appeal and lack of ability to hold the audience's attention often make them less persuasive than other methods.

2.4.2 Storytelling

Unlike informative ads, storytelling attracts attention and creates a lasting emotional connection, making the brand more memorable and compelling. Storytelling advertisements are also known as

narrative ads (Stubb, 2018, p. 55). These ads use a story to convey a commercial message. They often contain emotional appeals to create a positive sales atmosphere (Stubb, 2018, p. 55).

Stubb (2018) argues that narrative ads present information through a sequence of events, with a clear beginning, middle and end that resembles a fairy tale (p. 56). In addition, ads include characters portraying the benefits of the product or a narrator telling the story or both (Stubb, 2018, p. 56). In this way, the focus is on emotionally engaging the consumer with the characters. To elaborate further on the benefits of storytelling advertisements, this method provides improved engagement and attention as well. After all, storytelling ads attract attention by drawing viewers into a story and are more memorable (Stubb, 2018, p. 60). In addition, it encourages mental simulation, allowing viewers to visualise the events described and relate them to their own lives, which increases engagement (Kang et al., 2020, p. 47., Stubb, 2018, p. 58). Moreover, Kang et al. (2020) argue that companies can effectively use personas that evoke strong emotional responses from consumers. An example is a CEO sharing his personal story, which increases the emotional engagement of the audience (p. 53).

Consequently, several studies show that, as opposed to informative advertisements, storytelling has a direct impact on purchase intention (De Oliveira Júnior et al., 2022, Joshi et al., 2022, Tilaar et al., 2023). For instance, Tilaar et al. (2023) argue that storytelling is directly related to purchase intention and can also increase it indirectly through value co-creation (p. 14). This means that consumers feel more actively involved in the value of the product, which increases their purchase intention. In addition, De Oliveira Júnior et al. (2022) argue that storytelling has a direct impact on consumers' purchasing behaviour, particularly by stimulating emotional involvement, brand identification and engagement. Moreover, consumers appear willing to pay more for products when they are touched by a powerful and compelling story (p. 254).

Therefore, the following hypotheses have been formulated:
H2: The content format will have an effect on purchase intention.
H2a: Storytelling will result in higher purchase intention than informative content.

Storytelling thus proves to be an effective strategy within advertising, as it capitalises on emotions, engagement and recognition. By using stories in which consumers can recognise themselves, brands not only increase the attention value and recall of the ad, but also the purchase intention.

In conclusion, both informative and storytelling ads can influence consumer behaviour, yet they do so in different ways. Whereas informative ads mainly respond to logic and factual information, storytelling focuses on emotion, experience and narrative. Multiple studies suggest that storytelling is more effective in increasing purchase intention.

2.5 The interaction between the ad type and the content format on purchase intention

After establishing the individual effects of ad type (BGC, UGC and EGC) and content format (informative and storytelling) on purchase intention, it is equally important to examine how these two variables may interact together on consumer behaviour. Whereas H1 and H2 focus on the main effects of each of the variables individually, H3 focuses on the possible interaction effect between the type of ad and the content format used.

Several studies show that storytelling has a more powerful effect when deployed within more authentic, personalised forms of advertising such as UGC (Joshi et al., 2022, p. 19). Indeed, Joshi et al. (2022) argue that there are 4 aspects of storytelling that influence purchase intention, of which the Word-of-Mouth aspect is the most important (p. 19). In Word of Mouth, consumers share and discuss stories. EGC similarly involves a more human and personal approach than traditional brand content, as employees are seen as internal experts and loyal brand ambassadors (Saleem & Hawkins, 2021, p. 820).

It is therefore plausible that the effect of storytelling on purchase intention is enhanced when this narrative form is combined with an advertising form that is perceived as authentic, such as UGC or EGC. The impact of storytelling within BGC is expected to be weaker, as consumers are more likely to perceive this content as commercial and less trustworthy. Based on this, the following hypotheses are formulated:

H3: There will be an interaction effect between advertisement type (Brand-Generated Content, User-Generated Content, and Employee-Generated Content) and content format (Informative vs. Storytelling) on purchase intention.

H3a: The positive effect of storytelling, compared to informative content, on purchase intention will be stronger for User-Generated Content and Employee-Generated Content than for Brand-Generated Content.

H3b: The positive effect of storytelling, compared to informative content, on purchase intention will be strongest when the advertisement features Employee-Generated Content, compared to User-Generated Content.

3. Methods

This chapter discusses the methods used in this study. First, the choice of experimental design is justified, followed by the sampling method and the final composition of participants. Then, the materials used for the stimuli are described, including conducting the pre-test. Subsequently, The operationalisation of the measurements is then discussed, with an explanation of how the concepts were measured. Afterwards, the procedure of the experiment is explained. Lastly, the validity, reliability and ethics of the study are discussed.

3.1 Justification of methods

Quantitative research is a form of research based on the methods of the natural sciences, which produces numerical data and hard facts. It focuses on establishing cause-and-effect relationship between variables by using statistical methods (Ahmad et al., 2019, p. 1). A quantitative method was chosen for this study as it can describe characteristics of a large population and the data can be used to make descriptive statements about a population (Babbie, 2016, p. 286).

Since this thesis focuses on examining the causal effect of different ad types (BGC, UGC, EGC) and content formats (storytelling vs. informative) on consumers' purchase intention, an experimental design is appropriate. "Experiments are powerful tools to establish cause-effect relationships" (Vargas et al., 2017, p. 101). Neuman (2014) indicates that experimental research focuses on comparing two or more groups by measuring whether changes in one variable have an effect on another (p. 280). In other words, an experiment tests whether the independent variables, in this case ad type and content format, can actually cause a change in the dependent variable, purchase intention. "In an experiment, a researcher manipulates and controls one or more potentially causal variables (independent variables) and then observes the corresponding differences in the outcome: the dependent variable(s)" (Vargas et al., 2017, p. 101).

This experiment uses a 3x2 between-subjects quasi-factorial experimental design to investigate the effects of ad type and content format on purchase intention of high-protein food products. Within a between-subjects design, each participant is randomly assigned to one of the six experimental conditions. This is a valuable way because when participants are only exposed to one condition, it prevents the experience of a previous condition, from influencing the response to the next condition (Neuman, 2014, p. 288). In addition, participants will not behave differently after seeing multiple conditions, as with within-subjects designs Neuman (2014, pp. 300-303). Thus, choosing a between-subjects design allows for the effects of the independent variables to be measured without being influenced by other conditions. The quasi-factorial aspect refers to the fact that multiple independent variables are combined (3 ad types × 2 content formats), which allows the analysis of both main effects and interaction effects between the variables (Vargas et al., 2017, p. 111).

3.2 Sample

This section discusses the sample of this study. It first discusses the sampling method used to collect participants, followed by an explanation of the final sample size and composition.

3.2.1 Sampling method

"Sampling is the process by which you select a part of a larger population to study" (Babbie, 2016, p. 117). The sample target group consisted of adults aged 18 years and above, with no further restrictions, to reach a broad representation of consumers with potential interest in healthy food and advertisements. To reach the target group, this study used a couple of non-probability sampling methods. Non-probability sampling is defined as a technique in which samples are selected in a way that is not suggested by probability theory (Babbie, 2016, p. 195). The use of non-probability methods was chosen because of the limited time and resources of this study.

First, convenience sampling was used. Although this form of sampling carries the risk of sampling bias and therefore limited generalisability, it is an efficient and practical choice given the limited time and resources available within this thesis study (Babbie, 2016, p. 199). Secondly, snowball sampling was used. This involves the researcher collecting data on the few members of the target population that can be located, then asking individuals to provide the information needed to locate other members of that population they happen to know (Babbie, 2016, p. 196). A major disadvantage of this method is that it increases the risk of homogeneity within the sample, as participants often suggest like-minded people. However, it is a valuable method for approaching difficult-to-reach groups in an accessible way, which increases the scope of the sample (Babbie, 2016, p. 197). To minimise the limitations of convenience sampling and snowball sampling, the platforms SurveySwap and SurveyCircle were used. These online sharing platforms allow researchers to share their surveys with an audience outside their own social circle.

3.2.2 Sample size

As previously explained in section 3.1, the experiment followed a 3×2 between-subjects design, meaning that participants are randomly assigned to one of six conditions. As required by the Methodological Guidelines for Thesis Research (Janssen & Verboord, 2024, p. 13), the aim is to collect at least 30 participants per condition, resulting in a total sample size of preferred 180 participants. Participants were recruited through online platforms, including WhatsApp, Instagram, SurveySwap and SurveyCircle, ensuring diversity in age, gender and background. Ultimately, 207 ($N = 207$) participants participated in the study. The characteristics of these participants are discussed in further detail in section 4.2.

3.3 Materials

The materials used in this study include six different advertisements, which are classified according to the type of ad (BGC / UGC / EGC) and the type of content (informative / storytelling). The decision to build the stimuli on these two variables comes from the literature review which showed that they influence the purchase intention of healthy foods.

A total of 6 experimental conditions were therefore used in this study. In each condition, participants are shown a fictitious advertisement related to a high protein-food product. Protein-rich foods were chosen because many consumers automatically associate protein-rich products with health (Beltrá et al., 2024, p. 1). Consequently, the popularity of high-protein foods is only increasing. In fact, according to data from Innova Market Insights, there was an annual compound growth rate of 26% in the number of new foods and beverages with protein claims in Europe between 2017 and 2022 (Grebow, 2023, p. 33). Mantzouranis et al. (2023) additionally state that high protein diets are explicitly presented as healthy diets because of their positive impact on cardiometabolic health (p. 1). Due to this growing popularity and demand for high-protein, a high-protein food product is used in experiment.

To ensure the validity of the materials, consistency was maintained in the visual and content features of the ads within the same categories. This choice ensures that the only variables that vary within the groups are the independent variables, which minimises external influences and increases the reliability of the results (Vargas et al., 2017, p. 107).

Each condition shows the same product (a protein shake). This was generated using the ChatGPT 4.0 Mini AI model. The AI-generated images were then edited and optimised in Canva. This platform was used to add the text and other visual elements, eventually creating 6 stimuli with a uniform look. The following paragraphs will elaborate on how the manipulation of all 6 stimuli was done.

The two social media posts in the BGC condition, one informative and one storytelling, used exactly the same visual layout and brand look and feel. Both posts were presented in a product-oriented style, with no image of a person. The only difference between the two variants was in the text. The informative version provided a factual description, while the storytelling version told a short story from the perspective of the brand itself. The sender, branding, product image and graphics remained completely the same in both versions.

The two social media posts in the UGC condition, again one informative and one storytelling, used the same AI-generated male user. This user was in an identical visual setting in both posts. In the informative version, the user provided factual information about his use of the product. In the storytelling version, he shared a more personal experience. Except for the content of the caption, everything remained the same.

The two social media posts in the EGC condition, one informative and one storytelling, used an AI-created male persona, though this time positioned as the CEO of a high protein food company. Similarly, the visual structure of both ads was kept identical. In the informative version, the employee gave factual information about his product, while the storytelling version focused on his personal involvement and motivation. Except for the content of the caption, everything remained the same.

Although by definition there are differences in content between the 6 social media posts, such as the sender of the social media post, these differences are exactly what is needed to give credibility to the variable ad type. This variation does not constitute a distortion of internal validity, but rather is part of the experimental manipulation, where the aim is to measure the extent to which the source of a message influences purchase intention. The stimuli can be found in Appendix A.

3.3.1 Pre-test

Before the full experiment started, a pretest was conducted to evaluate the clarity and effectiveness of the six stimuli. The purpose of this pretest was to ensure that the manipulations of the independent variables were perceived by the participants as intended. Ultimately, 30 participants completed this pre-test. A target of 30 was aimed for, as Perneger et al. (2014) indicate that a sample size of at least 30 participants is recommended to have sufficient power to detect common problems (p. 150).

In the pre-test, participants were shown six stimuli. After each stimulus, they were given five statements that measured the extent to which the ad was interpreted as intended. The statements were: 'The post came from a brand,' 'The post came from a user,' 'The post came from an employee,' 'The post had an informational focus' and 'The post had a storytelling focus.' Participants rated these statements on a five-point scale ranging from 1 (completely disagree) to 5 (completely agree). In this way, it was possible to determine whether the stimuli created were interpreted correctly. The link to the entire pre-test can be found in Appendix B.

To check whether the stimuli were interpreted as intended, a one-sample t-test was conducted for each stimulus. A mean significantly higher than 3 indicates that the participant interpreted the stimulus as intended. Table 3.3.1 shows the results of the one-sample t-tests by stimulus, showing that all stimuli were rated significantly higher on average than the neutral midpoint of 3, confirming that the manipulations of ad type and content form were correctly perceived by the participants. This means that all materials, without adjustment, were utilised in the final experiment.

Table 3.3.1 Pre-test One-Sample t-test results

Stimuli	Type	M (SD)	p	Content	M (SD)	p
1	BGC	4.97 (0.18)	<.001	Informative	5.00 (0.00)	-
2	BGC	5.00 (0.00)	-	Storytelling	4.97 (0.18)	<.001
3	UGC	4.93 (0.25)	<.001	Informative	4.73 (0.79)	<.001
4	UGC	4.93 (0.25)	<.001	Storytelling	4.73 (0.79)	<.001
5	EGC	4.83 (0.38)	<.001	Informative	4.87 (0.35)	<.001
6	EGC	4.8 (0.66)	<.001	Storytelling	4.93 (0.25)	<.001

3.4 Operationalisation of measurements

This section explains how the concepts of this study are operationalised. The concepts are ad type, content format and purchase intention. These concepts were measured in the online experiment conducted using Qualtrics. As described earlier, the experiment was divided into six conditions based on a combination of ad type (BGC / UGC / EGC) and content format (informative / storytelling).

Table 3.4 The six conditions

Ad type	Informative	Storytelling
Brand-Generated Content (BGC)	Group 1	Group 2
User-Generated Content (UGC)	Group 3	Group 4
Employee-Generated Content (EGC)	Group 5	Group 6

The choice of the independent variables was based on the literature review in which it became evident that they differ in how they affect participants' purchase intention. Ultimately, three ad types were tested in combination with two content formats so that the effect of both ad type and content format on purchase intent was examined.

3.4.1 Purchase intention

Purchase intention was measured using Dodds, Monroe and Grewal's (1991) scale, which is considered a reliable measure of consumer intention to purchase a product (Afzali & Ahmed, 2016, p. 7). This scale consists of five questions specifically focusing on a consumer's willingness to buy the product. In this study, a shortened version of the Purchase Intention Scale was chosen, consisting of three items instead of the traditional five. A shortened version was selected since longer scales can lead to respondent fatigue and reduced data quality (Franke et al., 2013, p. 319). This decision is supported by Daltroy (1997). who argues that there is no need to use all the questions in a scale, as removing specific items often has little impact on the reliability of the scale (pp. 76-77). In addition, Shrout and Yager (1989) similarly examined that scales can be shortened without much loss in sensitivity or specificity (p. 447).

The three questions that were ultimately utilised in the study are "I would buy this product.", "If I were to buy a high protein product, I would consider this one." And "I am likely to purchase this product". These questions were operationalised on a five-point scale (from 1 = Strongly Disagree to 5 = Strongly Agree), with participants indicating the extent to which they agreed with the statements.

3.4.2 Control question and Manipulation check

This study made use of both a control question and a manipulation check. A control question was used to check whether participants actually paid attention to the stimulus and consequently whether the answers to the questions afterwards were reliable. One control question was added by asking if the participant looked carefully at the social media post. Participants were allowed to choose from the response options: 'Yes, I did' and 'No, I didn't'.

In addition to using a control question, manipulation checks were utilized. The survey used manipulation questions to ensure that the variables were appropriately manipulated so that the results of the experiment would not be distorted by confounding the stimuli (Neuman, 2014, p. 304). After seeing one of the 6 stimuli, the participant was asked to answer one question about the ad type and one question about the content format, depending on which stimuli they saw. For instance: "To what extent do you agree with the statement: 'The post you saw is brand-generated content.'" and "To what extent do you agree with the statement: 'The post you saw has an informative format'". These questions were operationalised on a five-point scale (from 1 = Strongly Disagree to 5 = Strongly Agree).

3.4.3 Demographics

The last questions of the experiment are the demographic questions. These demographic questions were intentionally placed at the end of the survey because such questions typically require low cognitive load, but may be perceived as boring or sensitive (Babbie, 2016, p. 265). By not asking these questions at the beginning, it prevents them from affecting participants' attention or causing a framing effect that could impact the answers to the experimental questions.

Participants were asked to enter their age via an open field. They were also asked about their gender, with response options: male, female, third gender or non-binary, and "would rather not say". Lastly, the level of education was then asked, with participants able to choose from: no formal education, high school diploma or equivalent, mbo or associate degree, bachelor's degree, master's degree, doctorate (such as PhD or MD), or other. The inclusion of these demographic questions is essential for describing the sample, promotes transparency in reporting and helps assess the generalisability and replicability of research findings (Hughes et al., 2016, p. 138).

3.5 Procedure

This section will explain the procedure of the experiment in order to make the study reproducible for future research. The experiment was conducted entirely online through the Qualtrics research platform. The choice for an online experiment was made based on two considerations. One is that it is an efficient way to reach a large and diverse audience. In addition, it allows participants to participate at a self-selected time in their own familiar environment, which improves response rate and data quality (Babbie, 2016, p. 284).

The experiment was distributed from 4 May to 17 May through the use of WhatsApp, Instagram, Surveyswap, SurveyCircle and snowball sampling. The call briefly stated the purpose of the study, without revealing the exact hypotheses or conditions, to avoid bias. A reminder was sent after a week, in order to reach as many people as possible this way. Participants who clicked on the link were immediately redirected to the Qualtrics environment, where they were randomly assigned to one of six experimental conditions (see Appendix A). Randomization through Qualtrics ensured that each participant had an equal chance of being assigned to one of the six groups.

When participants opened the experiment, they were first shown an informed consent that briefed them on the purpose of the study, the voluntariness of participation, the anonymity of their responses, and their right to stop at any time. By clicking "I agree," they gave explicit consent to participate, provided they were 18 years of age or older.

After giving consent, it was explained what the concepts BGC, UGC and EGC mean. Additionally, it was reported that the social media post they would see was generated by AI and that they should imagine encountering it on social media. After this explanation, a stimulus was shown in the form of a fictitious social media post featuring a high-protein drink. Depending on the condition the participant was randomly assigned to, this social media post varied in ad type (Brand-, User- or Employee-Generated Content) and content format (informative / storytelling).

After seeing the stimuli, a control question was asked to test whether the participant had viewed the ad attentively. Two manipulation checks were then administered to verify whether the ad was recognized as brand- or user- or employee-content, and as informative or storytelling. Subsequently, participants filled out a purchase intention scale consisting of three statements (such as, "I would buy this product"), based on a five-point Likert scale. Finally, they answered some demographic questions (age, gender, education level).

After completing the online experiment, participants were given a debriefing explaining that the stimuli were completely fictitious and created solely for research purposes. It further explained the purpose of the study, which was to understand the effectiveness of different ad types and formats on consumer behaviour. Participants were in addition given the researcher's contact details for any questions. The entire experiment can be found in Appendix B.

3.6 Validity, reliability, and ethics

This chapter focuses on ensuring the validity, reliability and ethical accountability of the study. To start with validity, where Neuman (2014) distinguishes between two different types of validity: internal validity and external validity (pp. 298 - 300). Internal validity refers to the certainty with which you can state that the independent variable is the cause of changes in the dependent variable (Neuman, 2014, pp. 298-299). In this study, internal validity was first ensured by conducting a pre-test before the experiment started. In addition, a control question and manipulation checks were added in the experiment. In this way, it was checked whether participants noticed and understood the manipulation details as intended. External validity refers to the ability to generalise findings to other people, situations and times (Neuman, 2014, p. 306). In this study, external validity was firstly ensured by using realistic and recognisable stimuli. In addition, efforts were made to recruit participants of different ages, backgrounds, genders, education levels and regions.

"Reliability means that a measurement instrument produces the same results when repeated measurements of the same phenomenon are made. A measurement method is reliable if it is consistent and predictable." (Babbie, 2016, p. 149). In this study, reliability was ensured by using an existing, validated measurement scale for the dependent variable purchase intention, namely Dodds, Monroe & Grewal's (1991) scale. Well-established measurement instruments have the advantage that they are accepted by the field and have often already proven to be reliable and valid (Vargas et al., 2017, p. 104). In addition, a pre-test was used in this study. The manipulations were pre-tested to ensure that they effectively represented the intended constructs and to identify potential problems before the main study.

Lastly, ethical guidelines were carefully considered in this study to ensure the rights, safety and welfare of the participants. To begin with, this was done by asking for informed consent. This informed participants of the purpose of the study, the nature of their participation and their right to stop at any time without giving a reason. Obtaining informed consent is a fundamental aspect of respecting participants' autonomy (Vargas et al., 2017, p. 111). In addition, the experiment used manipulated stimuli, such as fictitious advertisements, however, a deception was applied about the purpose of the study. Although this passive deception seems harmless, Vargas et al. (2017) argue that deception is never justified because of potential harm to participants, the field and society. Therefore, participants were subsequently informed about the true purpose of the study (p. 111).

3.7 Data Analysis

This chapter will discuss the analysis applied to the data collection. After the data collection was completed, the responses were exported and analysed using IBM SPSS Statistics (version 28.0.1.0). A two-way analysis of variance (ANOVA) was used to answer the research question.

According to Pallant (2011), a two-way analysis of variance allows you to test the effect of two independent variables on one dependent variable. The advantage of using a two-way ANOVA is that it allows the researcher to test for an interaction effect, which is what is used in this study (p. 106).

Before conducting the ANOVA, five assumptions underlying the use of ANOVA were validated. After the assumptions were confirmed, found in section 4.4, the main analysis was conducted. Once the assumptions were confirmed, the main analysis was conducted. This allowed the following to be investigated: the main effect of ad type on purchase intention, the main effect of content format on purchase intention and, lastly, the interaction effect between ad type and content format.

4. Results

In this chapter, the results of the study are presented, based on the analyses performed in IBM SPSS Statistics. First, this chapter will discuss how the data have been prepared, including the exclusion criteria. Next, descriptive statistics and the distribution of participants across experimental conditions will be described. Then the reliability test of the buying intention scale using Cronbach's alpha is discussed. Lastly, the final section of this chapter presents the results of the two-way ANOVA, which first evaluated the assumptions to ensure the appropriateness of the analysis technique and then elaborated on the main effects of ad type and content format, as well as their interaction effect on purchase intention.

4.1 Data preparation

Before the statistical analyses were performed in SPSS, several steps were taken to ensure the quality and reliability of the dataset. This was done through data cleaning. Data cleaning involves detecting and removing errors and inconsistencies from the data to improve data quality (Rahm & Hai, 2000, p. 3).

4.1.1 Data Cleaning

A total of 360 responses ($N = 360$) were initially collected through the online survey. Out of these, 9 responses were identified as preview data, which are test answers generated during the survey trial in Qualtrics and are excluded during data cleaning as they do not contain actual participants. Furthermore, 65 participants did not complete the survey completely and were therefore removed from the dataset.

In addition to these deletions, several participants were also excluded based on the control question. A control question was conducted to ensure that only data were recorded from participants who had paid sufficient attention to the stimulus material. Participants were asked, 'Did you pay close attention to the social media post you were shown?'. Those who answered 'No, I didn't' were considered to have failed the control question and were therefore removed from the sample. This resulted in an additional 79 removals, which led to a total number of participants of 207 ($N = 207$).

4.1.2 Manipulation Check

To assess whether the manipulations were perceived as intended, participants responded to two manipulation questions that corresponded to their assigned condition. One measured the perceived ad type (UGC / BGC / EGC), such as 'To what extent do you agree with the statement: The post you saw is brand-generated content' and the other measured the format (Informative /

Storytelling), such as 'To what extent do you agree with the statement: The post you saw has an informative format'. The manipulation questions were measured on a five-point Likert scale, where 1 represented 'totally agree' and 5 represented 'totally disagree'. Consequently, a lower mean score reflects stronger agreement with the intended manipulation.

Among 207 participants, 39 participants did not correctly identify the manipulation, which included 24 who did not correctly recognise the ad type manipulation and 15 who incorrectly assessed the content format manipulation. However, no participants were excluded based on these manipulation checks. This is because Kotzian et al. (2020) argue that "using manipulation checks to remove participants from the sample leads to an increased likelihood of significant effects, when in fact there are none based on the full sample" (p. 479). Their analysis shows that removing participants who do not successfully pass the manipulation check, for example because they do not perceive the manipulation correctly, is equivalent to systematically excluding cases that do not fit the expected direction of the hypothesis. This leaves a selective group of participants who actually do support the hypothesis, which can lead to a distorted picture of the true effect of the treatment (Kotzian et al., 2020, p. 479).

Table 4.1.2 presents the mean scores and standard deviations for the manipulation checks for each condition. Overall, these results indicate that the manipulations were largely perceived as intended, as most mean scores were well below the neutral midpoint (3) of the scale. This suggests that participants recognised the source and format of the content in line with their assigned experimental condition.

Table 4.1.2 The mean and standard deviation of the manipulation check per condition

Condition	*M* Ad Type	*SD* Ad Type	*M* Content Format	*SD* Content Format
BGC - Informative	1.42	0.67	1.58	1.03
BGC - Storytelling	1.54	1.07	1.86	1.00
UGC - Informative	1.83	1.28	1.89	1.09
UGC - Storytelling	1.55	0.94	1.88	0.96
EGC - Informative	2.08	1.37	1.88	1.11
EGC - Storytelling	2.21	1.43	1.97	1.25

4.2 Descriptive results

As described previously, the final sample for this study was $N = 207$ participants. Within this sample, the gender distribution was balanced, with 57.0% women ($N = 118$) and 42.5% men ($N = 88$). One participant indicated that he or she preferred not to indicate gender.

In terms of educational level, 46.9% of participants ($N = 97$) had completed a bachelor's degree, followed by 25.6% ($N = 53$) with a master's degree. A smaller proportion had a high school diploma or equivalent 14.5% ($N = 30$), or some form of college or associate degree 11.1% ($N = 23$).

Only 0.5% ($N = 1$) had a doctoral degree and 1.4% ($N = 3$) chose the "other" category. The age of the participants ranged from 18 to 72 years, with a mean age of 29.46 ($SD = 13.07$).

4.2.1 Distribution of participants to experimental conditions

In order to understand the distribution of participants across the experimental conditions, cross-tabulation was performed for the two independent variables. The final sample consisted of 207 participants in total ($N = 207$), with each of the six conditions containing between 31 and 39 participants. The results are presented in Table 4.2.1.

Table 4.2.1 distribution of conditions

		Content Format		
		Informative	Storytelling	Total
Type	BGC	31	35	66
	UGC	36	33	69
	EGC	33	39	72
Total		100	107	207

As shown in Table 4.2.1, the distribution of participants is balanced across cells, ranging from 31 to 39 participants per condition. This is in line with the guideline of Christensen et al. (2014, p. 247), who state that each condition should ideally consist of at least 30 observations to ensure sufficient statistical reliability. In addition, this is in line with Erasmus University's Methodological Guidelines for Thesis Research (Janssen & Verboord, 2024, p. 13), which recommend a minimum of 30 participants per condition in between-subjects experimental designs. Further analysis was therefore conducted with this distribution.

4.3 Reliability analysis

In order to assess the consistency of Dodds and Grewal's (1991) purchase intention scale, a reliability test was conducted. The dependent variable purchase intention was measured in each experimental condition using three items. "In statistics, Cronbach's alpha coefficient is used as an estimate of the reliability of a psychometric test" (Kilic, 2016, p. 47). According to the guidelines of Kılıç (2016), a Cronbach's Alpha of .70 or higher is considered indicative of good scale reliability (p. 47).

The reliability analysis including all 207 participants revealed a Cronbach's Alpha of $\alpha = .886$, indicating high internal consistency. A separate analysis of reliability per experimental condition was also conducted and confirmed similarly high reliability scores across all six conditions (see Appendix C1). From these results, it can be concluded that the purchase intention scale used exhibited

high internal reliability within all experimental conditions. None of the items needed to be removed to improve the reliability of the scale.

4.4 Two-way ANOVA

This section presents the results of the main analyses. To examine whether the two independent variables, ad type (BGC / UGC / EGC) and content format (informative / storytelling), have an effect on purchase intention, a two-way between-subjects ANOVA was conducted. Prior to conducting the hypothesis testing, descriptive results are presented first.

Table 4.4 shows the mean and standard deviation of purchase intention by condition. The highest mean score was observed in the EGC × Storytelling condition ($M = 3.71$, $SD = 1.12$), while the lowest score occurred in the BGC × Storytelling condition ($M = 2.87$, $SD = 1.14$).

Table 4.4 Descriptive statistics of purchase intention by condition

Ad type	Content format	M Purchase Intention	SD
BGC	Informative	3.05[a]	1.20
BGC	Storytelling	2.87[a]	1.14
UGC	Informative	3.56[b]	0.92
UCG	Storytelling	3.39[ab]	0.93
EGC	Informative	3.57[b]	1.08
EGC	Storytelling	3.71[b]	1.12

Means with different superscripts differ significantly, p < 0.05

Before interpreting the results of the two-way ANOVA, several assumptions were evaluated. According to Pallant (2011), there are five general assumptions of parametric techniques that relate to this analysis, which are the measurement level of the dependent variable, random sampling, independence of observations, normal distribution of the population, and homogeneity of variances between groups. If these assumptions are violated, they can affect the validity and reliability of research (pp. 205-207).

First, the dependent variable must be measured at the interval or ratios level. This ensures that parametric techniques can be applied (Pallant, 2011, p. 205). In this study, the dependent variable purchase intention was measured using a shortened version of Dodds, Monroe and Grewal's (1991) scale consisting of three items on a five-point scale.

Violating the second assumption, random sampling, does not seriously affect the results and one does not often occur in real world research (Pallant, 2011, p. 205). In this study, as mentioned earlier, non-random sampling methods were used. While this assumption was therefore violated, it was not considered a cause for concern. To limit the limitations of this non-random sampling, as stated earlier, the online platforms SurveySwap and SurveyCircle were used, which allowed the survey to be shared outside one's social circle.

Furthermore, according to Pallant (2011), the observations that form the data must be independent of each other. Meaning, each observation or measurement should not have been influenced by another observation or measurement (p. 126). In this study, the assumption of independence of observations was ensured by the between-subjects design, in which each participant was randomly assigned to one of the six experimental conditions and participated only once. As a result, each participant's measurements were independent of others.

As fourth, the assumption of normality of the residuals was considered as well. While no formal test was conducted, Pallant (2020) points out that a two-way ANOVA is relatively robust against violations of the normality assumption, especially for larger samples (p. 206). Specifically, according to Pallant (2020), samples of more than 30 participants per group provide sufficient basis to compensate for deviations from normality without significantly affecting the results (p. 206). In this study, each experimental condition contains between 31 and 39 participants, suggesting that any violations of normality do not significantly threaten the validity of the analyses (Pallant, 2011, p. 206).

Lastly, Levene's test was conducted to assess the assumption of homogeneity of variances, which is essential for the validity of ANOVA results (Gastwirth et al., 2009, p. 14). Gastwirth et al. (2009) argue that Levene's approach is powerful and robust to non-normality and therefore a tool to check homogeneity of variances (p. 1). The results showed that the error variance of the dependent variable (purchase intention) was not significantly different between the groups, $F (5, 201) = 1.901$, $p = .096$. Since this p-value is greater than the threshold of .05, it can be concluded that the assumption of homogeneous variances was not violated. Thus, the results of the ANOVA can be interpreted with confidence, using a significance level of $p < .05$, which is the commonly used significance level (Gastwirth et al., 2009, p. 4).

4.4.1 Main effect ad type on purchase intention

This section examines **H1:** The advertisement type will have an effect on purchase intention. The results of the two-way ANOVA show a significant main effect for ad type on purchase intention, $F (2, 201) = 7.352$, $p < .001$, $\eta^2 = .068$, which is presented in table 4.4.1. This indicates that the type of ad content has a statistically significant effect on the extent to which participants indicate their willingness to purchase the product.

The Scheffé post-hoc test indicated that average purchase intention was significantly higher for EGC ($M = 3.64$) compared to BGC ($M = 2.95$), $p = .001$. In addition, UGC ($M = 3.48$) similarly scored significantly higher than BGC, $p = .019$. However, no significant difference was found between EGC and UGC, $p = .659$, as can also be seen in Appendix Table C2.

Based on these findings, the null hypothesis is rejected and H1 is confirmed: The type of ad content has a significant impact on purchase intention. EGC is most effective in stimulating purchase behaviour.

Table 4.4.1 Results of the two-way ANOVA on purchase intention ($N = 207$)

	Sum of Squares	df	Mean Square	F	p	η^2
Ad Type	16.914	2	8.457	7.352	<.001	.068
Content Format	0.240	1	0.240	0.209	.648	.001
Ad Type* Content Format	1.185	2	0.592	0.515	.598	.005
Error	231.203	201	1.150			
Total	2599.333	207				

4.4.2 Main effect content format on purchase intention

This section addresses **H2:** The content format will have an effect on purchase intention. However, the conducted two-way ANOVA did not show a significant main effect for the independent variable content format on purchase intention, $F (1, 201) = 0.209$, $p = .648$, $\eta^2 = .001$. These results can be found in Table 4.4.1. This implicates that no difference was observed in purchase intention between participants who saw a social media post in an informative format and those who were presented with a storytelling format.

As a consequence, the null hypothesis is therefore not rejected, and accordingly no evidence was found for hypothesis H2: Storytelling content format will result in higher purchase intention than informative content. In conclusion, based on this analysis, it cannot be found that content format influences consumers' purchase intention.

4.4.3 Interaction effect ad type and content format on purchase intention

The third and final hypothesis is addressed in this section, which is **H3:** There will be an interaction effect between advertisement type and content format on purchase intention.

The conducted two-way ANOVA revealed no significant interaction effect between Ad Type and Content Format on Purchase Intention, $F (2, 201) = 0.515$, $p = .598$, $\eta^2 = .005$. These results indicate that the effect of ad type on purchase intention does not depend on how the content is presented (informative or storytelling), and conversely.

Consequently, the null hypothesis is therefore not rejected, and accordingly no evidence was found for hypothesis H3: There will be an interaction effect between Ad Type and Content Format on Purchase Intention.

4.4.4 Two-way ANOVA: Exclusion based on manipulation check

To test the robustness of the results, an additional analysis was conducted in which participants who had not correctly completed the manipulation questions were excluded, which is also known as a sensitivity analysis. "Sensitivity analyses are an important tool for understanding the extent to which the results of randomized trials depend on the assumptions of the analysis" (Morris et al., 2014, p.1). participants who answered 'somewhat disagree' or 'strongly disagree' to one of the two manipulation questions in their condition were removed from the dataset ($n = 39$), resulting in a final sample of $N = 168$. The two-way ANOVA was then re-run with this filtered dataset.

A two-way ANOVA was re-run on this filtered dataset. The results of this analysis showed again a significant main effect for ad type $F (2, 162) = 11.984$, $p < .001$, $\eta^2 = .129$ (see Appendix Table D1 for full ANOVA results). This supports H1, which predicted that ad type would have a significant impact on purchase intention. The mean of the variable purchase intention was the highest for EGC ($M = 3.94$), followed by UGC ($M = 3.53$), and lowest for BGC ($M = 2.91$). Descriptive statistics by ad type and content format for the sensitivity sample analysis are presented in Appendix Table D2. Compared to the original analysis, this suggests that removing participants who did not understand the manipulation properly resulted in a clearer effect of ad type.

In addition, the Scheffé post-hoc analysis within this sensitivity analysis revealed that there was a significant difference in purchase intention between BGC and both UGC ($p = .007$) and EGC ($p < .001$). While the difference between UGC and EGC was not significant in the original analysis, this difference approached marginal significance in the sensitivity analysis ($p = .055$). The complete results of the Scheffé post-hoc analysis can be found in Appendix Table D3. This finding suggests that excluding respondents who did not perceive the manipulations correctly resulted in more pronounced differences between ad types, which strengthens the robustness of the main effect found for ad type.

Furthermore, no significant effect was found for the variable Content Format, $F (1, 139) = 2.21$, $p = .140$, $\eta^2 = .016$. This means H2: The content format will have an effect on purchase intention' was not supported. Similarly, no significant interaction effect was found between Advertisement Type and Content Format, $F (2, 139) = 0.51$, $p = .605$, $\eta^2 = .007$, providing no support for H3: There will be an interaction effect between advertisement type and content format on purchase intention. In conclusion, this sensitivity analysis only confirms the initial findings for H1: The advertisement type will have an effect on purchase intention.

5. Discussion and Conclusion

5.1 Discussion of results

As explained in chapter 2, theoretical framework, purchase intention is an important indicator of the effectiveness of advertising because it reflects consumers' likelihood to purchase based on perceived value and trust (Dodds & Grewal, 1991, Ariff, 2014). This research has focused on 2 different ways of increasing this purchase intention, which are the source of the ad and the format of the ad. Since EGC has only been investigated limited in the existing literature until now, this was an important starting point for the purpose of this study. To begin with, several studies showed that UGC and EGC are perceived as more authentic and trustworthy than BGC, which can be seen as overly commercial (Tyrväinen et al., 2023, Saleem & Hawkins, 2021). Studies show that UGC and EGC enhance brands' credibility and emotional connection, increasing consumer engagement and the likelihood of a purchase (Mayrhofer et al., 2019, Demba et al., 2022). In addition, as a second, content format has been examined, with research showing that informative ads offer rational, fact-based arguments (Zebregs et al., 2014), while storytelling ads are more emotional and memorable, which frequently leads to higher purchase intention (Stubb, 2018, De Oliveira Júnior et al., 2022). Moreover, according to Joshi et al. (2022), storytelling is particularly effective when combined with authentic sources such as UGC and EGC, suggesting a potential interaction effect (p. 19). Ultimately, based on these findings, this study examined whether both ad type and content format have a significant effect on purchase intention. In this chapter, the hypotheses are discussed separately in order to subsequently answer the central research question.

5.1.1 Hypothesis 1

As mentioned in chapter 4, the results confirmed that ad type has a significant impact on purchase intention. In addition, the results showed that both UGC and EGC resulted in significantly higher purchase intention than BGC, while no significant difference was found between UGC and EGC.

Therefore, these findings are largely consistent with existing literature reviewed in chapter 2. Previous research indeed highlights that non-commercial sources such as UGC and EGC are perceived as more authentic and credible, increasing their persuasiveness (Tyrväinen et al., 2023, Mayrhofer et al., 2019, Saleem & Hawkins, 2021). This explains that both UGC and EGC resulted in significantly higher purchase intention than BGC. Reasons are that UGC is often trusted because it comes from peers without a direct commercial agenda, which reduces consumer scepticism and increases engagement (Sawaftah et al., 2021, Bahtar & Muda, 2016). Similarly, EGC leverages employees' prior knowledge and perceived expertise, positioning them as credible messengers, while avoiding the promotional tone characteristic of BGC (Saleem & Hawkins, 2021, Yan et al., 2021).

The sensitivity analysis also showed a significant main effect for ad type with now a marginally significant difference between EGC and UGC. This suggests that participants who correctly interpreted the source of the ad perceived EGC as more persuasive than UGC and supports the literature that EGC benefits not only from authenticity, but also from perceived expertise and brand-related knowledge (Saleem & Hawkins, 2021, Yan et al., 2021).

A possible explanation for the initial non-significance is that UGC may benefit more from social evidence power and the relatability of peers (Bahtar & Muda, 2016), therefore the benefit of EGC may seem smaller when conditions are not entirely clear or well controlled.

5.1.2 Hypothesis 2

As mentioned in chapter 4, the results of this study do not support Hypothesis 2, which expected content format to influence purchase intention. This means that no difference was found in purchase intention between participants who saw an informative ad and those who were exposed to a storytelling format. Also, the additional sensitivity analysis, which excluded participants who did not understand the manipulation well, confirmed this result. As a result, hypothesis 2 was rejected.

This outcome contrasts with previous literature from Chapter 2 that considers storytelling to be more powerful than informative ads in terms of engagement and consequently, purchase behaviour (Stubb, 2018, Kang et al., 2020, De Oliveira Júnior et al., 2022; Tilaar et al., 2023). Several studies emphasize that stories are more likely to be remembered (Stubb, 2018), encourage emotional engagement and help consumers identify with the brand or product (Kang et al., 2020, Stubb, 2018). Nevertheless, the absence of a significant difference in this study can be explained in several ways.

First, a possible explanation is that it is additionally possible that the use of AI-generated content was perceived by participants as unnatural or less believable, so the story elements were not believed. Especially in storytelling, recognition and emotional authenticity is essential to encourage engagement (Stubb, 2018, p. 57). In addition, the effectiveness of storytelling may depend on other factors such as personal relevance or visual execution aspects that may not have been optimally activated in this experiment.

Furthermore, another explanation is that informative posts can be effective for healthy eating, as consumers often emphasise the factual properties of products, such as nutritional value and health effects (Zebregs et al., 2014). Therefore, it can be suggested that in such situations, informative argumentation can be equally, or even more, persuasive than a storytelling post about healthy eating.

5.1.3 Hypothesis 3

As mentioned in chapter 4, the results do not support Hypothesis 3, which expected an interaction effect between ad type (BGC / UGC / EGC) and content form (informative / storytelling) on purchase intention. The two-way ANOVA showed no significant interaction effect, indicating that the effect of ad type on purchase intention did not depend on how the message was presented, and

conversely. Additional sensitivity analysis, which excluded participants who had not answered the manipulation questions correctly, similarly confirmed this, as no significant interaction effect was again identified. Therefore, based on this, Hypothesis 3 was rejected.

Comparing these results with the earlier literature from Chapter 2, the results are not consistent. This is because previous literature suggests that storytelling is especially effective when it comes from an authentic source such as UGC or EGC (Joshi et al., 2022, Saleem & Hawkins, 2021). For instance, Joshi et al. (2022) argued that a story works better when it comes from a common user than from a brand itself, which therefore says that UGC can have stronger influence on purchase intention (p. 19). In addition, EGC has also been presented in the theoretical framework as a powerful combination of expertise and humanity, which should make storytelling extra credible in this context (Saleem & Hawkins, 2021).

One possible explanation for the lack of an interaction effect is that participants focused mainly on the source of the post and less on the content type. Since the main effect of ad type, Hypothesis 1, was significant, this suggests that the source of the social media post played a larger role than the storytelling content. Reflecting on the literature found in Chapter 2, the combination of a credible source, such as UGC or EGC, and a compelling storytelling form should have an amplifying effect on purchase intent. Accordingly, Joshi et al. (2022) and Saleem & Hawkins (2021) argued that when both the messenger and the message are aligned, they can reinforce each other's effect and therefore increase persuasiveness (p. 19). However, if either element is deficient, such as when the story does not come across as sufficiently credible or relatable, then the expected interaction effect may not occur. In that case, consumers may respond primarily to the source of the advertisement and less to the content, which weakens the combined persuasion effect assumed in previous literature.

5.2 Limitations and directions

This section discusses the major limitations of the study and recommendations for future research. The section is divided into three parts: First, it discusses validity, then reliability and finally directions for future research.

5.2.1 Validity

While validity was carefully considered in this study, there are several concerns regarding validity. Internal validity was checked through control questions and manipulation checks. The control question was used to check whether participants had paid sufficient attention to the stimuli. Participants who indicated that they had not paid adequate attention were excluded from the analysis. This ultimately excluded 79 participants, which contributed to the internal validity of the study by including only data from participants who actively and consciously responded to the experimental

stimulus. In addition, the manipulation check aimed to verify that participants had correctly interpreted the ad form and content format. The results showed that most participants correctly recognized the manipulations, although there were 39 participants who did not. In line with the recommendations of Kotzian et al. (2020), these participants were not excluded from the main analysis to avoid bias in the results. However, an additional sensitivity analysis excluding this group showed that certain effects became stronger, suggesting that correct interpretation of the stimuli does affect outcomes.

Although both the control question and the manipulation checks contributed to internal validity, however, the fact that relatively many participants did not answer the control question as well as the manipulation questions correctly can be seen as a signal that the stimuli were not always sufficiently clear. Because even though the stimuli were designed based on the theory from Chapter 2 and pre-tested, it is still possible that the storytelling posts did not manage to convey the intended persuasiveness or credibility. In addition, the use of AI-generated images may have led some participants to perceive the ads as less authentic or real, which may have come at the expense of emotional impact. This is supported by the fact that 79 participants reported not paying close attention to the stimuli, and 39 did not answer the manipulation questions correctly. Therefore, these results suggest that the manipulations may not have been clear or convincing to everyone.

Another limitation concerns the composition of the sample regarding the consumption of high protein food products. The current study did not distinguish between participants who regularly consume high-protein products and those who do not. This could possibly have affected purchase intention, as consumers who are already interested in these types of products are perhaps more sensitive to advertisements.

5.2.2 Reliability

The reliability of this study was ensured in several ways. For instance, this study measured purchase intention using a shortened version of Dodds and Grewal's (1991) validated scale and although the scale was shortened from five to three items, this choice is methodologically sound and supported in previous literature (Franke et al., 2013, Shrout & Yager, 1989). Next, the internal consistency of the scale was tested via reliability analysis and indicated a very high internal reliability (Kılıç, 2016, p. 47). In addition, the pretest contributed to the reliability of the study by identifying and correcting any ambiguities in the stimuli beforehand. Lastly, the consistent design of the stimulus material within and between conditions contributed to an equal setting for all participants.

Although reliability was ensured as much as possible, some limitations can be identified with regard to reliability. For instance, a shortened scale was used, which, although reliable, may not have provided as complete coverage of the dependent variable purchase intention as the original scale. In addition, it involved self-reporting via an online survey, which may be sensitive to inaccurate filling

in. Moreover, participants may have been inclined to give socially desirable answers, especially given the topic of healthy eating. As participants may have been aware that they were participating in a survey about healthy eating, this may have influenced how they answered the intention questions, which may affect the reliability of the responses. Despite these limitations, it can be concluded that the measurements in this study generally show a high degree of reliability.

5.2.3 Directions for future research

This section offers suggestions for future research based on the limitations and findings of this study. Several directions can be identified for future research. First, it is recommended that the experiment be replicated with a larger sample size. This study worked with 207 participants, which meets the minimum requirements, however, a larger sample would increase the power of the analyses and contribute to more generalizable results, especially since 39 participants did not correctly interpret the manipulation questions. While it was substantiated In 4.1.2 that these participants did not need to be removed, It does indicate that distinguishing between subtle differences in ad type or content form can be difficult in a brief online context.

One way in which manipulation can be enhanced is to use existing brands rather than a fully AI-generated fictional brand. While AI-created brands offer neutrality in experimental research, in some cases they may also appear less credible to participants. Using an actual existing brand would potentially lead to more realistic evaluations, as consumers typically have stronger associations towards well-known brands than towards artificially generated brands. In addition, using an existing brand would not only increase the credibility of the study, but also provide more representative results that could be directly applicable and valuable for that specific brand.

In addition, future research might consider including only respondents who indicated that they regularly purchase high-protein food products. This would allow a more accurate determination of whether the effects found are due to the independent variables and not influenced by differences in interest in the type of product. Moreover, participants who have experience with the product type may respond more realistically to the ads.

Another valuable direction for further research is to study the effects that have been found in more depth. This research after all, has mainly provided quantitative insights into what the effect is on purchase intention, but gives less insight into why participants perceive certain posts as more convincing or less credible. Therefore, qualitative research can be an important complement.

Lastly, the literature suggested that storytelling is especially effective when shared within authentic and personal contexts, such as UGC or EGC (Joshi et al., 2022; Saleem & Hawkins, 2021). However, this study only examined purchase intention as a dependent variable. Future research could therefore focus on to what extent different ad forms and formats also lead to increased engagement, such as sharing, liking, or passing on the posts. This could provide important insights into how posts

go viral or how they contribute to brand diffusion across social networks. This not only looks at the impact on buying behaviour, but also the broader role consumers play in spreading brand messages.

5.3 Conclusion

This chapter will first provide an answer to the research question. Then, it reflects on the social and scientific relevance of the study. Finally, the generalizability of the findings is discussed.

5.3.1 Answer research question

The central research question was phrased as follows: "To what extent do ad type (Brand-Generated Content / User-Generated Content / Employee-Generated Content) and content format (Informational / Storytelling) influence purchase intention of healthy food products?"

The results showed that ad type has a significant influence on purchase intention. In particular, EGC led to higher purchase intention than BGC or UGC. This effect became more strongly apparent after excluding participants who did not answer the manipulation questions correctly. These finding align directly with the scenario outlined in the introduction of this thesis, where the CEO of a sports brand explains on social media why he developed a new high-protein shake. He shares his personal motivation and explains how he came up with this idea. This scenario reflects Employee-Generated Content and, as the results of this study show, actually proves more effective in driving purchase intention than other forms.

Although the scenario includes elements of storytelling, this study showed that the form of the content, informative or storytelling, had no significant effect on purchase intention. This may be explained by the fact that storytelling has less effect with functional products such as protein foods, where consumers are more likely to seek factual information than emotional stories. In addition, no interaction effect was found between ad type and content form.

To summarize, this indicates that a combination of, for instance, EGC with a storytelling format had no more effect than each element separately. The results therefore suggest that for high-protein foods, it is mainly the sender that determines the persuasiveness, and that the chosen storytelling format from the introduction plays no strengthening or weakening role in this.

5.3.2 Reflection of the relevance

This section reflects on both the scientific and social relevance of this research. After all, this research contributes to both the scientific literature and practice. Starting with scientific relevance, this study offers new insights into the effectiveness of different ad types and content formats on purchase intention, specifically within the context of healthy food products. Whereas previous studies primarily examined the effectiveness of storytelling and authenticity separately, this study combined

both concepts. In addition, the concepts of BGC and UGC have been widely researched, however, very limited academic research is available on the effectiveness of EGC. It is exactly this lack of evidence-based research that makes it valuable that this study measured EGC. As a result, the study fills a clear gap in the literature and provides a first step toward further research on the role of EGC within marketing.

From the social point of view, the research is equally relevant, as there is an increasing focus on healthy eating among consumers (Cuesta-Valiño et al., 2020, p. 1). The results give companies with a focus on healthy eating useful information to better align their marketing with consumers. Specifically, this research shows that EGC, in particular, is effective in promoting purchase intent than usual brand communications. In conclusion, it is relevant for companies to investigate how to incorporate EGC into their marketing strategies.

5.3.3 Reflection of generalizability of study

Although this study provides important insights about the impact of ad types and content formats on purchase intention, the generalizability of the results is limited by several methodological factors.

First, non-probability sampling was used. As a result, there is an increased risk of sampling bias, and the findings may not be representative of the entire population of consumers. However, the composition of the sample, presented in section 4.2, does show that there was a fairly equal distribution in both age, and gender.

In addition, AI-created advertisements and a fictional brand were applied in this experiment. While this allowed control of the stimuli, it raises questions about the extent to which the results apply in real-life situations where consumers face familiar brands and products. In reality, where consumers have pre-existing preferences, the effects could potentially be different.

In conclusion, if this study had a larger, representative sample, through probability sampling, combined with a realistic brand, this could enhance the generalizability of the findings.

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Appendix A. Stimuli

Stimulus 1 and 2: BGC, Informative/Storytelling

proteinplus
Sponsored

26G HIGH-QUALITY PROTEIN

NO ADDED SUGARS

LACTOSE-FREE (<0,1G/100ML)

PROTEIN+
PROTEIN MILKSHAKE
VANILLA FLAVOR

Ingredients
semi-skimmed milk (94%), milk protein (4%), maltodextrin, natural flavoring stabilizer: sodium phosphate, sweetener: sucrulose, lactase

Nutritional values	320ml
energy	215 kcal
fat	5.0 g
- saturated fat	3.5 g
carbohydrates	16 g
- sugars	16 g
protein	26 g
salt	0.69 g

Learn more

proteinplus Check out our newest protein milkshake!

✅ 25g protein per bottle
✅ with no added sugars
✅ lactose-free (<0.01g/100ml)
✅ available in 3 flavours

Perfect for after your workout.

proteinplus
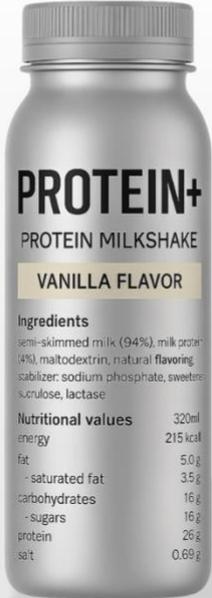Sponsored

WHEN FOOD IS HONEST, YOUR BODY KNOWS THE DIFFERENCE

PROTEIN+
PROTEIN MILKSHAKE
VANILLA FLAVOR

Ingredients
semi-skimmed milk (94%), milk protein (4%), maltodextrin, natural flavoring stabilizer: sodium phosphate, sweetener: sucrulose, lactase

Nutritional values	320ml
energy	215 kcal
fat	5.0 g
- saturated fat	3.5 g
carbohydrates	16 g
- sugars	16 g
protein	26 g
salt	0.69 g

Learn more

proteinplus In today's food industry, it's hard to tell what's really good for you. Somewhere along the way, we lost the point of what food should be: simple, nourishing, and honest.

That's why we created this shake: a clean, delicious formula with 26g of protein, no added sugars, and natural ingredients you actually recognize.

No distractions. Just what you need to fuel your body, clearly. Because when you know what you're putting in, you know what you're getting out.

We're setting a new standard! 💪

john_doe Good nutrition shouldn't be complicated.
This shake has everything I look for:
✅ 26g protein
✅ no added sugars
✅ lactose-free
✅ natural ingredients

Perfect for recovery or on-the-go.

john_doe I've been trying to eat a bit cleaner lately — not just hitting macros, but actually feeling good about what I put in my body. 💪

A few weeks ago, my brother handed me this PROTEIN+ shake after a workout. I wasn't expecting much... but it surprised me. 26g of protein, no added sugars, and ingredients I can actually pronounce. It just felt like the right fit.

Now it's part of my routine. Quick, clean, and honestly delicious. Still can't believe something this simple works so well for me. Pretty sure I've converted half my gym by now haha 😅

Stimulus 5 and 6: EGC, Informative/Storytelling

lucawells
CEO and Founder of PROTEIN+

···

lucawells As CEO and founder of PROTEIN+, I get a lot of questions about what makes this shake different.
The answer is simple: it's made to be as clean and effective as possible.
✅ 26g high-quality protein
✅ no added sugars
✅ lactose-free (<0.1g/100ml)
✅ clear, minimal ingredients

Created to keep things clear and honest, so you always know what you're getting!

lucawells
CEO and Founder of PROTEIN+

···

lucawells Before PROTEIN+, I tried a lot of shakes.
They all came with big health claims, but in the end, they were just highly processed products.

I started reading labels, doing research, asking questions.
The more I learned, the more I realized: most of these products weren't made to support you. They were made to sell.

That's when the idea for PROTEIN+ was born.
We built this shake with everything I couldn't find out there:
26g of clean protein, no added sugars, and ingredients that make sense. Simple. Clear. Honest.

Appendix B. Pre-test + Survey

Link to pre-test:

https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_0HubLcdNQREvefQ

Link to online experiment:

https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_0ulD91cS1oLVK1o

Experiment:

1. Informed consent

Hello!

Thank you for considering participating in this study conducted as part of a master's thesis at Erasmus University Rotterdam.

The survey will take approximately **3 minutes** to complete. It includes questions related to advertising, high protein food products, and your perception of different types of content. You will also be asked to provide some general demographic information. You are not asked to disclose your name or any personally identifying information, and your responses will remain anonymous.

Participation in this survey is entirely voluntary. There are no significant risks or discomforts expected, and you are free to withdraw at any point should you feel uncomfortable. Your responses will be treated with the utmost confidentiality. Data collected will be securely stored. Only authorized members of the research team will have access to the information, and it will be used solely for the purposes of this study.

By proceeding with the survey, you confirm that:

- You have read and understood the information provided.
- You voluntarily agree to participate in this study.
- You are at least 18 years old.

If you have any questions about this study or your rights as a participant, please contact:

Sophie Kraaijeveld

691144sk@eur.nl

Erasmus University Rotterdam

If you have read and understood the information above and voluntarily consent to participate in this research, please click "I agree" to proceed.

2. Explanation

In this survey, you'll see terms like brand-generated content, user-generated content and employee-generated content.

Here's what they mean:

Brand-Generated Content (BGC): Content created and shared by the brand / company itself

User-Generated Content (UGC): Content created by customers or users of a product or service

Employee-Generated Content (EGC): Content created by employees of a brand / company

3. Stimulus material (different for each 6 conditions; the following was for the control group)

The following advertisement was specifically developed for this study. Please imagine coming across it on social media.

Show one of the six stimuli

Control question

Did you pay close attention to the social media post you were shown? (Yes, I did / No, I didn't)

Manipulation check (2 for each participant - one for ad type, one for content format)

(Strongly agree/Somewhat agree/Neither agree nor disagree/Somewhat disagree/Strongly disagree)

"To what extent do you agree with the statement: 'The post you saw is brand-generated / user-generated / employee-generated content."

"To what extent do you agree with the statement: 'The post you saw has an informative / a storytelling format"

3 item purchase intention scale

"On a scale from 1 (*strongly disagree*) to 5 (*strongly agree*), please answer how relevant the following statements are for the hypothetical social media post you just saw"

I would buy this product

If I were to buy a high-protein product, I would consider this one

I am likely to purchase this product.

4. Demographic questions:

- Age (open question)

- Gender (male/female/third gender or non-binary/prefer not to say)

- Educational level (No formal education/high school graduate or equivalent/Some college or associate degree/Bachelor's degree/Master's degree/Doctoral degree (PhD, MD, etc.)/Other)

- I regularly purchase high-protein food products (Strongly agree/Somewhat agree/Neither agree nor disagree/Somewhat disagree/Strongly disagree)

5. Debrief & end of survey

Thank you so much for your participation!

The advertisement you viewed in this survey was entirely fictional. The product and the rest of the social media post were created specifically for the purposes of this academic study. You were randomly shown one of six versions of an advertisement designed for the study.

This research explores how different advertisement types (Brand-Generated Content, User-Generated Content, and Employee-Generated Content) and content formats (informative vs. storytelling) influence people's purchase intentions and engagement with health-related products. Your responses will help me better understand how different advertising strategies impact consumer behaviour and decision-making.

If you have any questions about the study or would like to learn more, please feel free to contact:

Sophie Kraaijeveld – 691144sk@eur.nl

Erasmus University Rotterdam

Appendix C. SPSS Output

C1. Reliability Test

The results of the reliability test showed that the scale met this standard in all six conditions: condition 1 (Brand-Generated Content + Informative) showed an α of .912, condition 2 (Brand-Generated Content + Storytelling) an α of . 870, condition 3 (User-Generated Content + Informative) an α of .852, condition 4 (User-Generated Content + Storytelling) an α of .820, condition 5 (Employee-Generated Content + Informative) an α of .882, and condition 6 (Employee-Generated Content + Storytelling) an α of .902.

Table C1. Scheffé post-hoc test

Comparison	Mean Difference	*SE*	*p*	95% CI (LL, UL)
BGC – UGC	-0.52*	0.18	.019	-0.98, -0.07
BGC – EGC	-0.69*	0.18	.001	-1.14, -0.24
UGC - BGC	0.52*	0.18	.019	0.07, 0.98
UGC - EGC	-0.17	0.18	.659	-0.61, 0.28
EGC - BGC	0.69*	0.18	.001	0.24, 1.14
EGC - UGC	0.17	0.18	.659	-0.28, 0.61

Note. SE = Standard Error; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

* p < .05. The mean difference is significant at the .05 level.

Appendix D. SPSS Output Sensitivity Test

Table D1. Results of two-way ANOVA on purchase intention after exclusion based on manipulation check (N = 168)

	Sum of Squares	df	Mean Square	F	p	η^2
Ad Type	27.754	2	13.877	11.984	<.001	.129
Content Format	0.262	1	0.262	0.226	.635	.001
Ad Type* Content Format	0.285	2	0.142	0.123	.884	.002
Error	187.598	262	1.158			
Total	2100.222	168				

Table D2. Descriptive statistics for purchase intention after exclusion based on manipulation check (N = 168)

Ad Type	Content Format	M	SD	n
BGC	Informative	3.01	1.25	28
	Storytelling	2.82	1.15	29
	Total	2.91	1.19	57
UGC	Informative	3.56	.94	36
	Storytelling	3.51	.92	28
	Total	3.54	.92	64
EGC	Informative	3.94	1.05	21
	Storytelling	3.94	1.14	26
	Total	3.94	1.09	47
Total	Informative	3.47	1.12	85
	Storytelling	3.40	1.16	83
	Total	3.44	1.14	168

Table D3. Scheffé post-hoc test after exclusion based on manipulation check (N = 168)

Comparison	Mean Difference	SE	p	95% CI (LL, UL)
BGC – UGC	-0.62*	0.20	.007	-1.11, -0.14
BGC – EGC	-1.02*	0.21	<.001	-1.55, -0.50
UGC - BGC	0.62*	0.20	.007	0.14, 1.11
UGC - EGC	-0.40	0.21	.158	-0.91, 0.11
EGC - BGC	1.02*	0.21	<.001	0.50, 1.55
EGC - UGC	0.40	0.21	.158	-0.11, 0.91

Note. SE = Standard Error; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit.

* p < .05. The mean difference is significant at the .05 level.

Appendix E. AI Declaration

Declaration Page: Use of Generative AI Tools in Thesis

Student Information

Name: Sophie Kraaijeveld

Student ID: 691144

Course Name: Master Thesis CM5000

Supervisor Name: Petra Tenbült

Date: 24/06/2025

Declaration:

Acknowledgment of Generative AI Tools

I acknowledge that I am aware of the existence and functionality of generative artificial intelligence (AI) tools, which are capable of producing content such as text, images, and other creative works autonomously.

GenAI use would include, but not limited to:

- Generated content (e.g., ChatGPT, Quillbot) limited strictly to content that is not assessed (e.g., thesis title).
- ~~Writing improvements, including~~ grammar and spelling corrections (e.g., Grammarly)
- Language translation (e.g., DeepL), without generative AI alterations/improvements.
- Research task assistance (e.g., finding survey scales, qualitative coding verification, debugging code)
- Using GenAI as a search engine tool to find academic articles or books

☒ I declare that I have used generative AI tools, specifically ChatGTP and Deepl in the process of creating parts or components of my thesis. The purpose of using these tools was to aid in generating content or assisting with specific aspects of thesis work.

☐ I declare that I have NOT used any generative AI tools and that the assignment concerned is my original work.

Signature:

Date of Signature: 15/06/2025

Extent of AI Usage

☒ I confirm that while I utilized generative AI tools to aid in content creation, the majority of the intellectual effort, creative input, and decision-making involved in completing the thesis were undertaken by me. I have enclosed the prompts/logging of the GenAI tool use in an appendix.

Ethical and Academic Integrity

☒ I understand the ethical implications and academic integrity concerns related to the use of AI tools in coursework. I assure that the AI-generated content was used responsibly, and any content derived from these tools has been appropriately cited and attributed according to the guidelines provided by the instructor and the course. I have taken necessary steps to distinguish between my original work and the AI-generated contributions. Any direct quotations, paraphrased content, or other forms of AI-generated material have been properly referenced in accordance with academic conventions.

By signing this declaration, I affirm that this declaration is accurate and truthful. I take full responsibility for the integrity of my assignment and am prepared to discuss and explain the role of generative AI tools in my creative process if required by the instructor or the Examination Board. I further affirm that I have used generative AI tools in accordance with ethical standards and academic integrity expectations.

Signature:

Date of Signature: 15/06/2025

Prompts:

- Can you explain to me what exactly a methodology is?

- Can you rewrite this sentence '…' to more academic English?

- Can you check the grammar in this sentence?

- SPSS gives an error message. What are possible causes?

- I want to design a stimuli. Can you create a protein shake with this info:

This is the information that should be on the bottle:

PROTEIN+

PROTEIN MILKSHAKE

VANILLA FLAVOR

Ingredients

semi-skimmed milk (94%), milk protein (4%), maltodextrin, natural flavouring,

stabiliser: sodium phosphate, sweetener: sucralose, lactase

Nutritional values

100ml 320ml

energy 279 kJ 921 kJ

66 kcal 215 kcal

fat 1.5 g 5.0 g

- saturated fat 1.0 g 3.5 g

carbohydrates 4.9 g 16 g

sugars 4.7 g 16 g

protein 7.7 g 26 g

salt 0.21 g 0.69 g

- Can you create a BGC post of this?

- Can you create a UGC post from this?

- Can you create an EGC post from this?

- What should I look out for when writing future research?