



Preferences of Young German Adults for Naturally Sweetened Snacks: A Comparison between Corporate Brands and Influencer Brands

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Abstract

Title of the dissertation: “Preferences of Young German Adults for Naturally Sweetened Snacks: A Comparison between Corporate Brands and Influencer Brands”

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Over recent years, consumers’ eating behaviors have shifted from main meals to more frequent snacking, raising concerns due to high-energy-density snacks rich in sugar, salt, and fat, potentially contributing to obesity. As concerns about processed foods grow, demand for healthier snacks with less processing and natural ingredients rises. This shift reflects a desire for transparency in dietary choices, evidenced by ingredient lists and health claims on packaging. This study aims to understand the impact of extrinsic and intrinsic attributes, namely type of sugar, cocoa content, presence of naturally sweetened claim, and price, on young German adults’ preferences for dark chocolate. Further, it investigated whether these preferences change based on whether the product is from a corporate or influencer brand, a brand launched by a social media influencer. An online survey with 168 participants was conducted, incorporating an information treatment and a conjoint analysis task. Findings show that dark chocolate from corporate brands is preferred over influencer brands, likely due to higher familiarity, loyalty, and trust. Coconut sugar was strongly preferred over regular sugar, while the effect of a naturally sweetened claim was non-significant, indicating a preference for factual nutrition information over health claims. Consumer preferences did not differ significantly between the corporate and influencer brand treatment. The results underscore the importance of transparent and informative marketing strategies focusing on ingredients rather than health claims. Influencers launching their brands must build brand awareness, loyalty, and trust among young German adults by providing factual information about their products.

Keywords: naturalness, clean labeling, human brands, social media influencers, dark chocolate, natural sugars, health consciousness, consumer preferences, conjoint analysis, information treatment

Resumo

Título da dissertação: “Preferências dos jovens adultos alemães por snacks naturalmente adoçados: Uma comparação entre marcas de empresas e marcas de influenciadores”

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Nos últimos anos, comportamentos alimentares dos consumidores mudaram das refeições principais para snacks mais frequentes, o que suscita preocupações devido aos snacks ricos em açúcar, sal e gordura, que podem contribuir para a obesidade. À medida que crescem as preocupações com alimentos processados, aumenta a procura por snacks mais saudáveis e naturais. Esta mudança reflete um desejo de transparência nas escolhas alimentares, evidenciado pelas listas de ingredientes e alegações de saúde em embalagens. Este estudo visa compreender o impacto dos atributos extrínsecos e intrínsecos—tipo de açúcar, teor de cacau, presença de alegações de adoçamento natural e preço—nas preferências dos jovens adultos alemães pelo chocolate preto. Além disso, investigou se essas preferências mudam conforme a marca ser corporativa ou de um influenciador. Foi realizado um inquérito online com 168 participantes, incorporando um tratamento de informação e uma tarefa de análise conjunta. Os resultados mostram que o chocolate preto de marcas corporativas é preferido em relação às marcas de influenciadores, provavelmente devido a uma maior familiaridade e confiança. O açúcar de coco foi fortemente preferido em relação ao açúcar normal, enquanto o efeito da alegação de “adoçado naturalmente” não foi significativo, indicando uma preferência por informações nutricionais factuais. As preferências dos consumidores não diferiram significativamente entre o tratamento de marca corporativa e de influenciador. Os resultados sublinham a importância de estratégias de marketing transparentes e informativas, centradas nos ingredientes. Influenciadores que lançam suas marcas devem focar na criação de lealdade e confiança entre jovens adultos alemães, fornecendo informações factuais sobre produtos.

Palavras-chave: naturalidade, rotulagem limpa, marcas humanas, influenciadores das redes sociais, chocolate preto, açúcares naturais, consciência sanitária, preferências dos consumidores, análise conjunta, tratamento da informação

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List of Abbreviations

BFY	Better-for-you
BOP	Back-of-Package
CI	Confidence Interval
CL	Clean Label
CB	Corporate Brand
FMCG	Fast Moving Consumer Goods (FMCG)
FNI	Food Naturalness Index
FOP	Front-of-Package
IB	Influencer Brand
IM	Influencer Marketing
SM	Social Media
SMI	Social Media Influencer

1. Introduction

1.1 Background and Problem Statement

Over the past years, consumers' eating behavior and patterns have changed significantly. Traditional patterns of consuming three main meals per day have shifted towards more frequent consumption of smaller amounts of food, an eating behavior referred to as snacking (Chaplin & Smith, 2011). Snacking has become prevalent between and in place of regular meals (Crofton et al., 2013). Snack foods can be defined as processed foods, ranging from minimally processed foods to highly processed energy-dense products, that are eaten between meals in small to moderate quantities (Mayhew et al., 2015). Snacking trends have been recognized as key in the fields of food, nutrition, and health (Mellentin, 2020). Indeed, the number of consumers who eat snacks regularly has risen significantly since 2013. According to a study by Mondelez International (2022), 71% of consumers worldwide snack at least twice daily. The motivations behind snacking vary widely and encompass a range of factors, including hunger, the need for energy, stress relief, boredom, cravings, and pleasure (Crofton et al., 2013).

Research on the impact of snacking frequency on diet quality and wellness has yielded inconsistent findings (Miller et al., 2013). On the one hand, snacking is associated with slightly more nutrient-dense diets, leading to overall improved diet quality, and as part of a balanced diet, it may help moderate blood sugar and metabolic disease risk factors (Xu & Zizza, 2012; Hunter & Mattes, 2019). On the other hand, the increase in snacking in Western diets has raised concerns due to the consumption of high-energy-density snacks containing high amounts of sugar, salt, and fat, potentially leading to increased daily energy intake and obesity (Graaf, 2006; Torgerson et al., 2005; Piernas & Popkin, 2010). This is particularly concerning, given that global adult obesity rates have more than doubled since 1990, resulting in 890 million adults classified as obese in 2022 (World Health Organization, 2024). The World Health Organization (2015) recommends individuals to reduce their daily free sugar intake to less than 10% of their total daily energy intake, which is equivalent to fifty grams. Per capita annual sugar consumption in Germany was around thirty-two kilograms in 2022/23, which translates to approximately ninety-one grams per individual per day (Ahrens, 2024).

Ultra-processed foods are defined as industrial products that, beyond including salt, sugar, oils, and fats, also contain additives not typically used in home cooking. These additives are intended to replicate the sensory qualities of foods that are minimally processed or homemade. Steele

and colleagues (2016) conducted a cross-sectional analysis of data from the National Health and Nutrition Examination Survey 2009–2010 with the aim of uncovering how ultra-processed foods contributed to added sugar consumption in the United States. This cross-sectional study analyzed the dietary content of added sugars and the proportion of individuals consuming more than 10% of their total energy from added sugars among around 9,400 participants aged one year and older, using at least one 24-hour dietary recall. Results showed that ultra-processed foods comprised more than half of energy intake and accounted for nearly 90% of energy intake from added sugars, indicating that those products play a significant role in excess sugar intake (Steele et al., 2016). As overweight and obesity have important health consequences, resulting in noncommunicable diseases such as cardiovascular diseases and diabetes, consumers are advised to limit their energy intake from total fats and free sugars (World Health Organization, 2024).

Regarding market trends, McKinsey (2022) conducted an online survey with consumers in the United States, the United Kingdom, France, and Germany after the release of pandemic restrictions. This study highlighted that consumers are increasingly committed to achieving good health through nutrition. In this market research, 50% of consumers across age groups stated that healthy eating, implying the reduced consumption of processed foods and sugar, is their top priority. With rising concerns about the negative impacts of highly processed food consumption and evolving consumer needs, the market for healthy snacks is increasing (Grimmelt et al., 2022; Conway, 2023). In 2021, the global market for healthy snacks reached 85.6 billion US dollars and is projected to grow at a 6.6% annual rate from 2022 to 2030, reaching 152.3 billion US dollars by 2030 (Grand View Research, 2023). The tension individuals experience between the prospect of immediate gratification by indulging in an energy-dense snack and their long-term goal of staying healthy remains central to making unhealthy food choices, however, playing a key role in the rising rates of obesity (Mundel et al., 2017; Del Prete & Samoggia, 2020). On the other hand, consumers have a broader desire for snacks that help support both physical and mental well-being without compromising taste or enjoyment (Mondelēz International, 2022).

Chocolate bars are currently one of the most popular snacks in Germany (Statista Research Department, 2022), with over half of German consumers (58%) reporting eating this product several times a month. Mainstream chocolate products contain high levels of saturated fat and sugar. Moreover, they tend to be heavily processed and may contain several food additives and

preservatives, which add to their reputation as unnatural and unhealthy (Perkovic et al., 2022). Given the growing consumer demand for healthier, more natural products, food brands have started replacing refined white sugar in sweet snacks, including chocolate bars, with less calorie-dense alternatives, including natural sweeteners such as stevia, sugar beet, and honey (KoRo, 2024; aboutfood, 2024; Arshad et al., 2022). Natural sugars are gaining relevance as their consumption in comparison to refined sugar might lead to beneficial health outcomes, including the retention of beneficial bioactive molecules lost during the sugarcane refining process, the prevention of weight gain, and the reduction in blood glucose levels (Castro-Muñoz et al., 2022). Several studies investigated the impact of natural sweeteners, mainly stevia, on consumer preferences, health perceptions, hedonic acceptability, and sensory properties (Prada et al., 2021; Sipple et al., 2022; Bolha et al., 2020). However, there is a lack of studies investigating consumers' preferences for other natural sugars, such as raw cane sugar, which consumers seem to expect to be tastier than stevia (Prada et al., 2021).

Health claims and Front-of-Package (FOP) nutrition labels are increasingly being adopted by food brands to address the burden of sugar overconsumption and the trend toward healthier eating. Research has shown that mandatory Back-of-Package (BOP) nutrition labeling is often ignored or misinterpreted by consumers (Temple, 2019; Cowburn & Stockley, 2005). These cues may entail summaries of product composition, detailed nutritional information, and statements associating certain nutrients with health benefits (Prada et al., 2021). By having the potential to help consumers make more informed choices, these types of information cues can be instrumental in the promotion of healthy diets (Temple, 2019; Kaur et al., 2017). One specific system of food labels is the clean label (CL). A CL signifies products with fewer, familiar, less processed ingredients, avoiding negative additives and strongly associated with nature (Oliveira do Nascimento et al., 2018; Asioli et al., 2017; Aschemann-Witzel et al., 2019). Alongside the growing demand for healthy snacks, the use of influencer marketing (IM) by food brands is becoming increasingly common. As consumers spend a lot of time on social media (SM) platforms today, companies have recognized the importance of collaborating with online influencers to promote their brands and products through IM (Sweeney, 2017; Leung et al., 2022). However, instead of solely advertising other brands for a one-off payment, many influencers are themselves now becoming food entrepreneurs and launching their own brands, aiming to secure a more long-term, steady income (Heide, 2022). One relevant example in the sweet snack category is Naturally Pam (www.naturally-pam.com), an influencer food brand launched in 2020 by one of Germany's most prominent Social Media Influencers (SMIs),

Pamela Reif. Naturally Pam offers natural, clean, and organic snacks online and in selected retail stores in Germany, including chocolate bars. The Naturally Pam brand generated more than three million euros in revenue in 2021 alone (Torster, 2023). Although IM is on the rise and SMIs like Pamela Reif have started launching their own food brands, research assessing their impact on consumer snack product preferences and acceptance of naturally sweetened snacks, compared to mainstream corporate brands' marketing initiatives, is lacking.

1.2 Aim and Scope

This thesis investigates the preferences for naturally sweetened snacks among young German adults. Dark chocolate bars, which have recently gained popularity for their high cocoa content and health benefits compared to regular or milk chocolate, have been selected as the object of study (Montagna et al., 2019). Dark chocolate bars can be considered snacks because they are typically consumed in small amounts between meals, offering convenience and a quick energy boost, and fall into the category of processed foods. Specifically, the present study seeks to determine how key chocolate bar attributes, namely cocoa content, the type of sugar used in formulation, the presence of a naturally sweetened claim on the packaging, and price level, affect consumer preferences for dark chocolate bars. In addition, it investigates whether presenting a new type of manufacturing brand (entrepreneurial influencer vs mainstream corporate) might enhance or suppress the effects of other product characteristics on consumer preferences. To achieve these goals, the following research questions are addressed in this thesis:

RQ1: Does the type of brand, the type of sugar, particularly from a natural source, the presence of a naturally sweetened label claim, the cocoa content, and the price level impact young German adults' preferences for dark chocolate bars, and if so, by how much?

RQ2: Are there differences in the effects of these product attributes and their levels on consumer preferences when dark chocolate bars are manufactured and marketed by SMI rather than mainstream manufacturing brands?

This study considers young adults aged between 18 and 35 years old who have lived in Germany for more than ten years or have German citizenship as target consumers. The focus is limited to the German market to directly address and analyze the unique tastes and purchasing behaviors specific to this region. This approach enhances the precision of the study, which

allows the provision of actionable insights that can be directly applied within the German context.

1.3 Research Approach and Methods

A deductive, explanatory research approach was followed to answer the proposed research questions, which implies establishing a causal relationship between variables (Saunders et al., 2009). An online survey featuring a conjoint task was designed, distributed online, and conducted with a sample of young German adults aged between 18 and 35 years. Conjoint analysis has been selected to examine how consumers trade off different attributes and attribute levels derived from literature and determine their product preferences (Rao, 2014). After, hypothetical product profiles were created and shown to consumers, who stated their preferences for those profiles (Rao, 2014). Using regression analysis, the impact of the different levels of each attribute on consumers' preferences could be determined (Rao, 2014). The results were used to empirically test the stated research hypotheses.

Previous studies show that framing choices with specific scenarios can influence individual judgments and decision-making (van Til et al., 2009). Therefore, this thesis also investigated whether presenting the chocolate bar shown in the conjoint task as an entrepreneurial influencer or mainstream corporate brand affected consumers' preferences. By treating brand type as a moderator, this study seeks to explore the broader impact of SMIs on consumer preferences for innovative food products, namely naturally sweetened snacks.

1.4 Relevance and Contributions

The results of this research have important practical implications for product, pricing, and marketing managers operating with both corporate brands (CBs) and influencer brands (IBs). It is known that the majority of new Fast Moving Consumer Goods (FMCG) fail in the marketplace. According to a study by Nielsen (2014) that analyzed 12,000 new FMCG introduced between 2011 and 2013 in the Western EU markets, 76% did not last after one year of sales. The reasons for food product failure are diverse, with one of the main problems being the lack of understanding of consumer motivations and choices (Dijksterhuis, 2016). Hence, for a company to succeed, the decision process regarding product attributes, positioning, communication, distribution, and pricing must clearly understand how consumers choose among competing alternatives (Rao, 2014). Therefore, understanding how much specific product attribute levels impact consumer preferences is highly beneficial for professionals

involved in product development and marketing. By providing insights on which products meet consumers' needs and market trends, companies can promote healthy diets while improving revenues simultaneously.

1.5 Outline

This thesis is laid out in six chapters. The first chapter introduces the research by focusing on its importance, background, goals, methods used, and overall relevance. Afterward, relevant existing studies on natural food preferences, chocolate consumption, and the role of SMI are reviewed to provide more context and set the basis for the conjoint analysis. The third chapter describes the research approach, design, and data analysis process in detail. The study results are presented and illustrated in the fourth chapter, and the stated research questions are answered accordingly. The results are discussed and compared to existing studies in the following chapter. Finally, the thesis is concluded by summarizing the main findings, pointing out any limitations, and suggesting ideas for further research.

2. Literature Review

2.1 Consumer Trends for Natural Eating

Rising health awareness and concerns over lifestyle-related ailments have created a demand for convenient, nutritionally balanced snacks suitable for on-the-go consumption (Grand View Research, 2023; Asioli et al., 2017). This shift has prompted individuals to consider the components used in the food products they consume, where the ingredients come from, and how they are made (Oliveira do Nascimento et al., 2018). The number of consumers considering the ingredient list on the back of the package of processed foods as important information rose from 3% in 2011 to 78% in 2013, being the second most crucial factor when choosing a product, after price (Ingredion, 2014).

As a result, there is a movement towards less processed foods made of easy-to-understand ingredient lists, reflecting a broader desire for transparency and simplicity in dietary choices (Oliveira do Nascimento et al., 2018). These evolving consumer preferences highlight a significant shift towards more natural and wholesome food products. A study by Nielsen (2015) revealed that the most essential food characteristics for consumers are freshness, minimal processing, and naturalness. This is also demonstrated in a systematic review study conducted by Román and colleagues (2017), indicating that natural food is very important to consumers. This study concluded that consumers associate naturalness in foods with origin, production methods, and composition, favoring natural ingredients and avoiding artificial additives, preservatives, and colorants. Furthermore, they prefer minimally processed products that mirror homemade foods, as well as traditional production methods that maintain what they consider to be the food's natural state. Finally, consumers associate natural foods with foods that are likewise healthy, tasty, fresh, and eco-friendly (Román et al., 2017). The perceived importance of naturalness in foods was further assessed by computing a Food Naturalness Index (FNI) (Román et al., 2017). The FNI aims to accurately measure the degree of perceived food naturalness, correlating it with consumers' perceptions of food naturalness in different dimensions. Ten attributes of naturalness obtained from product information and claims were considered as the basis for the development of the FNI (Sanchez-Siles et al., 2019). Numerous studies have investigated the correlation between age, gender, and FNI, revealing that FNI is higher among older and female consumers than their younger and male counterparts (Román et al., 2017).

Figure 1 describes the factors driving consumers' perceptions and preferences for natural food according to a model proposed by Asioli and colleagues (2017).

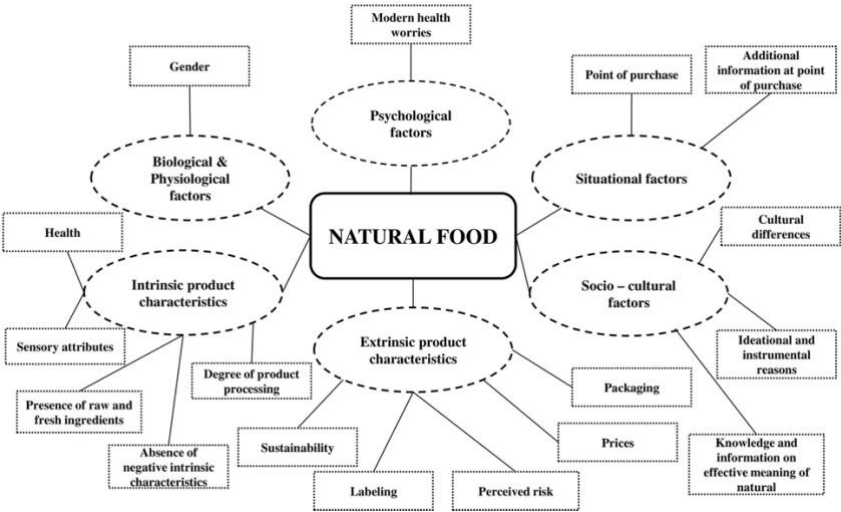


Figure 1: Factors that drive perceptions and preferences for natural food products.

The main drivers identified are psychological, situational, sociocultural, biological, and physiological factors, along with intrinsic and extrinsic product characteristics. For example, consumers with a higher number of modern health worries and a high-risk perception of the presence of chemicals in food show a stronger preference for foods that contain only natural ingredients (Devcich et al., 2007; Dickson-Spillmann et al., 2011). Intrinsic product characteristics like healthiness, the absence of negative intrinsic characteristics, sensory attributes such as pleasure, the presence of fresh and raw ingredients, and the degree of product processing are key motivations influencing consumers' preferences towards natural food products (Binner, 2015; Rozin, 2012; Dubé et al., 2016; Asioli et al., 2017). Relevant extrinsic product characteristics influencing the perception of natural food are product sustainability and packaging, with functional signals such as labels, logos, or claims and emotional aspects such as colors, shapes, and graphics (Asioli et al., 2017; Binner, 2015).

2.2 Consumer Preferences and Market Trends for Dark Chocolate

2.2.1 Chocolate Consumption and Purchasing Behavior

Chocolate is an accessible luxury product that consumers eat for personal gratification and pleasure (Mundel et al., 2017; Del Prete & Samoggia, 2020). The basic ingredient of chocolate is cocoa. Cocoa beans are cleaned, roasted, and shelled to nibs, then ground and refined to cocoa liquor. This liquor is finally combined with various ingredients to produce different types of

chocolate (Montagna et al., 2019). Over the last 40 years, there has been a discontinuous but steady growth in worldwide cocoa production, reaching 5.24 million tonnes during the crop year 2020/21 (Shahbandeh, 2023). Europe is the largest importer of cocoa beans and the largest chocolate manufacturer and export market worldwide (CBI, 2022). Del Prete & Samoggia (2020) reviewed studies on chocolate consumption and purchasing behavior, identifying four key drivers: personal preferences, product characteristics, socio-demographic factors, and economic considerations.

Personal preferences, including taste and health-related reasons, influence chocolate consumption. A focus group conducted by De Pelsmaecker and colleagues (2017) revealed that the sweetening ingredient, specifically the use of sugar or sugar substitutes for delivering a sweet taste, was mentioned as one of the most important drivers of chocolate purchases. In line with previous research, consumers preferred sugar over sugar substitutes, namely stevia, in their selection of chocolate, indicating that stevia might not be a natural sugar to be included in snack products as an alternative to refined sugar. On the other hand, consumers still want to enjoy delicious chocolate, even if it is formulated to be healthier than conventional products (Del Prete & Samoggia, 2020).

Considering the type of chocolate, Del Pelsmaecker and colleagues (2017) found that Belgian consumers prefer milk and dark chocolate over white chocolate. In Italy, however, the most highly preferred chocolates are dark and extra dark chocolate, containing at least 43% cocoa content (Merlino et al., 2021). The darkness of chocolate is directly correlated with its cocoa content; the darker the chocolate, the higher the percentage of cocoa it contains (Rewe, 2024; Edeka, 2024). Consumer preferences for dark chocolate consumption are due to the interest of individuals in healthier but also sustainable and high-quality chocolate alternatives (Merlino et al., 2021; Del Prete & Samoggia, 2020). Dark chocolate, in comparison to other types of chocolate, is characterized by a high content of cocoa, flavonoids, and theobromine, along with a low sugar level associated with beneficial health effects (Montagna et al., 2019; Petyaev & Bashmakov, 2017).

Chocolate preferences are also affected by extrinsic product characteristics, like packaging, brand, and price. Most research on this topic focuses on the impact of organic, fair trade, sustainability, and GMO (genetically modified organism)-free claims (Del Prete & Samoggia 2020). Meanwhile, few studies have looked at the impact of CLs on preferences for chocolate

products. In addition, age, gender, and income are relevant socio-demographic factors that impact consumers' preferences. Finally, price and promotion are economic attributes that determine purchasing behavior (Del Prete & Samoggia, 2020). According to Kiss and colleagues (2022), price is by far the most important factor influencing the choice of chocolate. Its impact is, however, moderated by the socio-demographic characteristics of consumers. A study by Stamer and Hermann (2006) identified five distinct categories of chocolate consumers, from those focused solely on price to those prioritizing quality and brand. These groups vary by income, career stage, family size, and their awareness of brand or quality.

2.2.2 From Refined White Sugar to Natural Sugar

Sugar intake is a significant public health problem that has gained awareness among consumers of all ages in recent years (Arshad et al., 2022). Refined white sugar made from sugar cane or sugar beets is used in many conventional snacks. Following the extraction, purification, evaporation, and crystallization methods of sugarcane juice, the resulting product is subject to various stages of refinement, during which it can lose some of its mineral content. Subsequently, substances like clarifiers and preservatives are introduced, which persist in the final products (Curi et al., 2017; Arshad et al., 2022). With rising health concerns and changing preferences, consumers are actively seeking natural products, including those with natural sugar.

Natural sugars are substances derived from natural sources that add sweetness to food products (IMARC Group a, 2023). There is a variety of natural sugars with different applications, functionalities, and textures, including stevia, honey, maple syrup, date sugar, agave nectar, and coconut sugar (Castro-Muñoz et al., 2022; Saraiva et al., 2020). In contrast to refined sugars, natural sugars are designed to enhance flavor while at the same time offering positive consumption effects, such as improving metabolic health, preventing weight gain, and lowering blood glucose, thereby potentially contributing to a healthier lifestyle (Castro-Muñoz et al., 2022; IMARC Group a, 2023). Natural sugars are gaining popularity as preferred food ingredients among health-conscious consumers. The global market for natural sugars is expected to grow by 5.5 billion US dollars, reaching a total of 28 billion US dollars by 2026, marking a significant rise from the figures recorded in 2020 (Valuates Reports, 2021).

A study conducted by Prada and colleagues (2021) investigated the impact of sugar-related claims on the perceived healthfulness, caloric value, and expected taste of food products among

Portuguese-speaking consumers. The researchers found that products with stevia claims were rated as healthier, less caloric, and less tasty than products with sucrose. Claims with cane sugar and honey, on the other hand, were perceived as both healthier and tastier. This study demonstrates that different types of natural sugars have varying effects on consumer perceptions, considering expected healthfulness, caloric content, and taste. The finding that stevia-sweetened products are perceived as less tasty is supported by a study conducted by Sipple and colleagues (2022) on consumer perceptions of ice cream and frozen desserts in the “better-for-you” (BFY) category. BFY features are defined as text or images on packaging that claim or imply health-related benefits, positioning the product as a healthier option (Brownbill et al., 2018). An online survey recruited participants aged 18 years or older who consume ice cream or frozen desserts from a North Carolina Sensory Service Center database. Results showed that consumers who place significantly more importance on the type of sweetener than on other attributes prefer sugar over stevia and monk fruit. This suggests that BFY ice creams and frozen desserts are still considered indulgent. The flavor and taste remain more important for consumers than the perceived healthiness (Sipple et al., 2022). Notably, items labeled with stevia are deemed healthier and less caloric but less tasty than their regular counterparts (Prada et al., 2022). This variation in perception warrants a broader investigation into preferences for natural sugars.

2.2.3 Dark Chocolate Market in Germany

A market analysis of dark chocolate bars was conducted in the present study to determine the product’s relevant attributes and levels. The market of interest was defined as sizeable German supermarket chains that are positioned in the mid to high price ranges, including Rewe and Edeka. Furthermore, as mass supermarket chains mainly offered dark chocolate bars with refined sugar, specialized organic supermarkets focusing on dark chocolates with natural sugars were considered. Both online and physical point-of-sales of relevant supermarket chains were visited. This methodical approach was essential to better understand the product offerings and pricing strategies at hand. Table 1 shows the results of the analysis, i.e., a selection of the brands offering chocolate bars, their cocoa content, the type of sugar used in the product, and the price per 100 grams.

Table 1: Market research on chocolate (Rewe 2024; Edeka 2024; Alnatura 2024).

Brand	Cocoa content	Type of sugar	Price / 100g
Supermarket own brand (Rewe, Edeka)	50%	Sugar	1.09€
Rittersport	50%	Sugar	1.49€
Vivani, Rapunzel	50%	Coconut blossom sugar	3.11€, 3.13€
Supermarket own brand (Rewe, Edeka)	70%	Sugar	1.09€, 1.39€
Gepa, Lindt	70%	Sugar	2.29€, 2.69€
Naturally Pam (Influencer brand)	70%	Coconut blossom sugar	3.28€
Supermarket own brand (Alnatura)	70%	Raw cane sugar	1.19€
Love Chock, Vivani	70%	Raw cane sugar	3.84€, 2.49€
Supermarket own brand (Rewe)	85%	Sugar	1.39€
Lindt	85%	Sugar	2.69€
Vivani	85%	Raw cane sugar	2.49€

Most chocolates, especially those offered in larger German supermarket chains, were found to contain refined sugar (Rewe, 2024; Edeka, 2024). Few products included natural sugars, such as coconut blossom and raw cane sugar. These were typically offered by brands focusing on organic and more natural options and placed on dedicated shelves. A more extensive selection of chocolates with natural sugars was found in organic supermarkets such as Alnatura (Alnatura, 2024). The prices of these products varied widely, with refined sugar being less expensive than natural sugar and supermarkets' own brands being less expensive than manufacturer brands. A detailed overview of the dark chocolate bars found in the selected supermarkets can be found in Appendix A.

2.3 Consumer Perception and Preferences for Clean Label Products

2.3.1 Understanding and Evaluation of Clean Label Products

With the growing trend in consumer preferences for simple and natural food options and increasing health concerns related to composition, manufacturers started to develop products featuring CLs, highlighting ingredient simplicity and naturalness (Oliveira do Nascimento et al., 2018; Maruyama et al., 2021; Asioli et al., 2017). This CL movement also reflects higher

perceived risks, some skepticism toward specific ingredients and processing techniques, and a growing lack of consumer confidence in regulatory standards (Asioli et al., 2017). According to a study by Ingredion (2022) involving global product developers from large and mid-sized food companies, 40% of the manufacturers reported implementing price increases, while 58% observed a rise in overall revenue following a shift to and adoption of CL claims. The market for CL ingredients was valued at 50.1 billion US dollars in 2023 and is projected to expand to 82.5 billion US dollars by 2032 (IMARC Group b, 2023).

The CL movement is primarily an industry-led initiative that capitalizes on consumer fears about nutrition and health, often promoting products with cheaper, non-beneficial ingredients sold at premium prices. Despite its popularity, the term CL remains vague and misleading, as its perceived health benefits are largely unsubstantiated (Chen et al., 2022). Weak regulatory enforcement of CL allows brands to make dubious health claims that potentially may harm more vulnerable consumer groups, such as those with eating disorders or chronic illnesses. To mitigate these issues, clear guidelines on the use of CLs, stricter disclosure requirements, and support litigation against misleading claims need to be implemented (Negowetti et al., 2021).

Despite its popularity, there is no commonly accepted definition of a CL product as the CL label concept is challenging to define, and the meaning varies among consumers (Asioli et al., 2017; Aschemann-Witzel et al., 2019). However, it is generally recognized that the absence of negatively perceived ingredients in the ingredient list is a crucial aspect of clean labeling (Aschemann-Witzel et al., 2019). Those negatively perceived ingredients are those not commonly used when preparing food at home, unexpected in food product recipes, and not easily recognized and/or difficult for consumers to understand. Examples include allergenic ingredients, additives, and industrially processed ingredients (Sanchez-Siles et al., 2019; Aschemann-Witzel et al., 2019). CL products can be understood as foods with a short, simple list of familiar and expected ingredients that sound like they could come from the consumers' kitchens, without artificial and chemical-sounding components (Asioli et al., 2017; Oliveira do Nascimento et al., 2018). Hence, the closer an ingredient or product is perceived to be in regard to its natural form, the higher the perception of its "cleanliness" by consumers (Oliveira do Nascimento et al., 2018).

Consumers evaluate CL foods typically by examining information provided on the packaging at the FOP and/or BOP. By looking at the FOP, consumers consider the product's cleanliness

broadly by assumption and through inference. The information can cue the CL characteristic, including short textual and visual claims, logos, simple labels, or free-from information on additives and preservatives. By looking at the BOP, consumers evaluate the cleanliness of products strictly by inspection. This information includes the ingredient list and nutrition fact panels (Asioli et al., 2017). In a study conducted by Cao and Miao (2022), consumers were asked to name CLs they came across during grocery shopping. The research participants were individuals aged 18 and older with grocery shopping experience recruited through Amazon's Mechanical Turk survey platform. The labels mentioned by consumers fell into six major attribute categories: less processed, elimination of undesired ingredients, humane treatment claims, fewer ingredients, altruistic claims, and others (Cao & Miao, 2022).

2.3.2 Impact of Clean Labels on Consumer Preferences

Several studies have investigated the impact of CLs on consumer preferences and behavior. Parker and colleagues (2018) conducted a study to assess consumer hedonic preferences for protein beverages made with sweeteners. Consumers for the study were selected from the North Carolina Sensory Service Center database in the US. Participants were between 18 and 54 years old, engaged in exercise at least once a week, consumed ready-to-mix protein powders with vanilla flavor at least twice a month, and were familiar with nonsucrose sweeteners, having consumed them at least once in the past three months. It was found that a labeling claim of “naturally sweetened” was associated with higher overall liking and purchase intent. This finding was likewise supported by the results of a conjoint study uncovering that the type of sweetener was the primary driver of choice for parents when purchasing chocolate milk for children (Xiaomeng et al., 2014). An online survey on chocolate milk preferences, featuring a conjoint analysis task, emotion-related questions, and a Kano questionnaire, was administered to 312 adults with children. Results showed that parents preferred natural noncaloric and nonnutritive sweeteners, or sucrose, over artificial sweeteners and reduced sugar, with an all-natural label resulting most attractive to the majority. Finally, Sipple and colleagues (2022) investigated consumer perceptions of ice cream and frozen desserts in the BFY category. It was found that the most preferred general claim was “natural”, while the most preferred sweetener claim was “naturally sweetened”. Hence, research across various studies highlights that CLs, especially those indicating natural or naturally sweetened, significantly enhance consumer preferences and purchase intentions for sweet snacks and beverages, underscoring the value of naturalness in foods.

2.4 The Rise of Influencer Marketing and Influencer Brands

2.4.1 *Social Media Influencers and Their Impact on Consumers*

The practice of IM through SMI has gained relevance with the strong growth and popularity of SM platforms over the last decade (Farivar & Wang, 2021). Indeed, IM surged from a 1.7 billion US dollar industry in 2016 to a 21.1 billion US dollar one in 2023, and it is anticipated that it will continue on a rapid growth trajectory, with projections estimating that the market will expand to 24 billion US dollars by the end of 2024 (Geysler, 2024). IM stands for collaborations between brands and SMI, where brands offer benefits such as free products or payment, and the SMI, in return, promotes products and services (Vrontis et al., 2017). Influencers may help disseminate branded content using their SM pages, encouraging their communities of followers to buy them and/or creating customized content for the commissioning brand's SM channels (Wirtz, 2023). In the latter case, influencers are referred to as content creators.

SMIs have typically built a sizeable social network of followers, which allows them to reach a high number of consumers and to be viewed as trusted tastemakers in one or more market niches (De Veirman et al., 2017). A study by Lou and colleagues (2019) analyzed IM campaigns on Instagram for flagship brands from the top 50 apparel companies listed in Apparel Magazine's 2016 edition, focusing on brands that primarily target adolescents and adults. A total of 44 brands were identified; three lacked Instagram accounts, leaving 41 brands for analysis. The study identified 145 brand-influencer ad dyads involving 27 brands and 138 influencers. Influencer-promoted ads received significantly more consumer liking and commenting than brand-promoted ads, leading to higher engagement. Moreover, SMI followers are found to often display a cult-like enthusiasm for the products shared by influencers and a corresponding high engagement with the products featured in influencer-promoted ads (Lou et al., 2019).

Other work investigated how SMI characteristics, namely trustworthiness, degree of product expertise, and attractiveness, affect consumer preferences and other marketing outcomes (Vrontis et al., 2017). A longitudinal study conducted by Fink and colleagues (2020) revealed that the credibility of a celebrity endorser strengthened brand image in the short term and enhanced its purchase intention over four years. Meanwhile, the persona- and content-driven attributes of SMIs help them better establish a relational and emotional bonding with their followers (Vrontis et al., 2017). Their personas and content curation abilities lead followers to see them as human brands, meeting ideality, relatedness, and competence needs and thereby

fostering a stronger attachment. Indeed, SMIs can be considered human brands because they display brandable persona-driven qualities and content curation skills that contribute to fulfilling their followers' needs, both informational and emotional. The stronger the emotional connection, the more effectively SMIs influence their followers to accept product and brand endorsements (Vrontis et al., 2017). While SMI qualities, like inspiration, enjoyability, similarity, physical attractiveness, and authenticity, are persona-related traits, informativeness, visual aesthetics, and expertise are more associated with content quality (Ki et al., 2020).

2.4.2 Social Media Influencers as Human Brands

As the influence of influencers over consumers grows, it becomes important to conceptualize them as human brands (Jun & Yi, 2020). Traditionally associated with businesses, products, organizations, or services, brands are now also recognized as being able to represent humans (Close et al., 2010; Thomsen, 2006). Human brand is a term that refers to any well-known persona who is the subject of marketing, interpersonal, or inter-organizational communications (Thomsen, 2006; Close et al., 2010). Different types of human brands include celebrities, fashion models, CEOs, politicians, sportspeople, culinary chefs, and artists.

Influencers can be considered as a particular type of human brand, also referred to as IB. The human brand-building process of conventional celebrities and SMIs differ somewhat (Jun & Yi, 2020). Celebrities have built their influence mainly through traditional channels, such as television and magazines, being thus based on one-way recognition. In contrast, SMIs became influential due to their activities in SM platforms, mainly by creating and publishing their own unique content based on their expertise in a specific field. Furthermore, active interaction, including real-time, direct, rapid, and interactive two-way communication, may make followers feel like special individuals rather than anonymous group members (Jun & Yi, 2020). Indeed, the crucial difference between human brands and conventional brands is their ability to interact, engage, and build emotional bonds with consumers (Saboo et al., 2016).

A study conducted by Jun & Yi (2020) found that influencer interactivity was positively related to authenticity and emotional attachment, leading to increased brand loyalty through brand trust. Influencer interactivity is the ongoing two-way communication between influencers and their followers, facilitated through continuous comments and feedback on the influencer's SM account. Another study by Fatma & Khan (2024) showed that brand authenticity positively influenced attachment and brand attitude, leading to a higher willingness to pay. These

researchers conducted a survey over four weeks in India using a self-administered questionnaire distributed to adult residents. Based on both studies, it can be concluded that influencer interactivity enhances brand authenticity and emotional attachment among followers, fostering brand loyalty through increased trust and positively impacting their willingness to pay (Jun & Yi, 2020; Fatma & Khan, 2024).

2.4.3 Emergence of Influencer Brands

Seeing the impact of human brands on consumers, many influencers started to develop and sell their own brands and products. The products influencers launch nowadays are very diverse, including fashion, beauty, and food categories (Heide, 2022). Since a brand is directly and exclusively associated with the influencer who created it, the personal attributes of the influencer are directly transferred to the brand. Hence, IBs are likely to fit their creators' personalities and lifestyles. As influencers are usually specialized in a specific area, influencers who offer natural food products are likely to be associated with healthy food and fitness. As an example, one of the most well-known IBs in the German fitness food market is Naturally Pam. This brand was created by Pamela Reif, a German fitness influencer publishing recipes and workout plans who has over 200,000 followers on Instagram (Heide, 2022; Reif, 2024). Margizos and colleagues (2021) investigated the drivers of Chinese consumers' intention to buy IBs. Their results show that the perceived value and social norms of buying IBs had a positive and significant relationship with consumers' purchase intention. Furthermore, the moderator role of self-identity was reported in the relationship between price and purchase intention, suggesting that the fan status of followers makes them more tolerant of price increases.

2.5 Conclusion and Research Hypotheses

The demand for healthy and natural food options is increasing. Studies focusing on chocolate indicate a preference for dark chocolate in European markets compared to other types of chocolate. Dark chocolate with higher cocoa content, ranging from 50% to 85% cocoa content, is seen as superior in taste and is associated with health benefits, sustainability, and high quality, factors that are increasingly important to consumers (Del Pelsmaecker et al., 2017; Merlino et al., 2021; Del Prete & Samoggia, 2020). The trend towards natural and minimally processed foods, as noted by Oliveira do Nascimento et al. (2018) and Nielsen (2015), further supports the preference of consumers for chocolates with higher cocoa content, as they are perceived to be more natural than those with lower content. This leads to the first research hypothesis:

Hypothesis 1: Consumers prefer dark chocolate bars with a higher cocoa content over those with a lower content, regardless of the type of brand.

With the shift towards natural food products, there is a growing interest and preference for products with CLs, as evidenced by multiple studies across different food categories. Sipple and colleagues (2022) found that in the BFY category, products labeled as “natural” and “naturally sweetened” were most preferred, indicating a preference for natural claims. Similarly, Parker and colleagues (2018) observed that protein beverages labeled “naturally sweetened” garnered higher overall liking and purchase intentions. These findings suggest a preference for naturally sweetened claims across food products, leading to the second hypothesis:

Hypothesis 2: Consumers prefer dark chocolate bars with a natural sweetener claim over those without a natural sweetener claim, irrespective of the type of brand.

Although the sweetener used in chocolate seems important to consumers, they prefer sugar over sugar substitutes, indicating that there may be a conflict between health and taste motives, and consumers are not willing to trade taste for health aspects. Studies mainly used stevia as natural sugar (Prada et al., 2021; Sipple et al., 2022). Based on these insights and to further explore consumer preferences for natural sugar, the present study examines natural sugars other than stevia. As most naturally sweetened chocolate bars in German supermarkets contain coconut blossom sugar or raw cane sugar, these two types are considered in addition to regular sugar, referred to as sugar. Further, influencers who offer products with natural ingredients are likely to be associated with healthy food and fitness, as IBs typically reflect their creators’ personalities and lifestyles. Therefore, the third hypothesis is stated as:

Hypothesis 3: Consumers prefer dark chocolate bars with natural sugars over those containing refined sugar, with this preference being stronger for an IB compared to a CB.

Considering existing studies, it can be concluded that influencer interactivity enhances brand authenticity and emotional attachment among followers, fostering brand loyalty through increased trust and positively impacting their willingness to pay (Jun & Yi, 2020; Fatma &

Khan, 2024). Relevant price levels for chocolate were identified, considering existing products in the German market. Based on this, the fourth hypothesis is stated as:

Hypothesis 4: Consumers prefer dark chocolate bars with a lower price over those that are more expensive, with this preference being stronger for a CB compared to an IB.

Figure 2 represents the conceptual model of this study. Whereas the naturally sweetened claim, the price, the type of sugar, and the cocoa content are independent variables, preference is the dependent variable. Finally, the type of brand acts as a moderator variable that might influence the impact of the independent variables on the dependent variable. The levels of each attribute are outlined in Table 2, presented in the third chapter of this thesis.

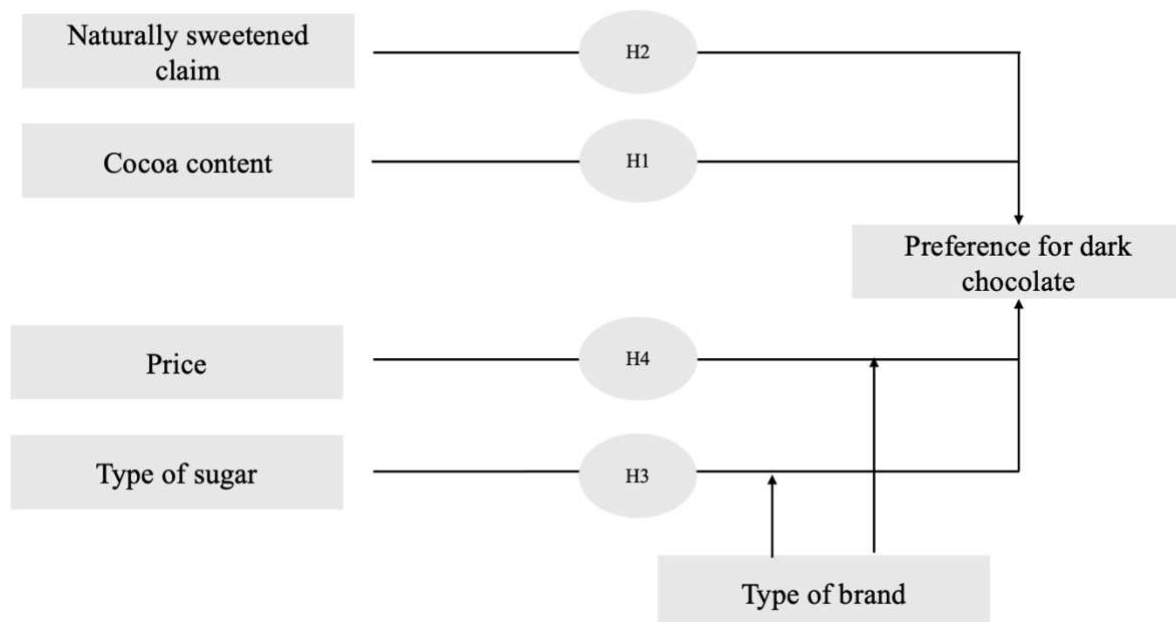


Figure 2: Overview of the conceptual model investigated in this thesis.

As consumers generally seek more natural options and dark chocolate has gained popularity in recent years, it is expected that there will be no difference in preference for cocoa content and the presence of a naturally sweetened claim between IBs and CBs (Hyp. 1-2). On the other hand, it is anticipated that consumer preferences for price and type of sugar in chocolate bars will vary by brand. Consumers are expected to be less price-sensitive but more sugar-sensitive with IBs and more price-sensitive but less sugar-sensitive with CBs (Hyp 3-4).

3. Methodology

3.1 Research Approach

This thesis followed an explanatory, deductive research approach. Explanatory studies establish causal relationships between variables by studying a situation or a problem experimentally (Saunders et al., 2009). In the context of this thesis, the cause-and-effect relationship between different product attributes, which are independent variables, and young German adults' preferences for naturally sweetened snacks, considered as the dependent variable, was investigated. Independent variables considered were the price, the cocoa content, the type of sugar shown in the ingredients list, and the presence of a naturally sweetened claim in dark chocolate bars. Furthermore, a between-subject information treatment was introduced to test whether the impact of these variables on consumers' preferences changes depending on the type of brand (corporate vs. influencer). By manipulating the type of brand, any effects on brand type on the differences in preferences for dark chocolate and its main attributes can be studied. Based on deductive reasoning, a conceptual framework is developed by stating hypotheses after reviewing relevant literature. Those hypotheses are then tested by using and analyzing primary data collected through an online survey (Saunders et al., 2009). The survey flow is illustrated in Appendix B; its online printout can be found in Appendix C. A conjoint analysis task, based on stated preference ratings, was selected as the core of the survey.

3.2 Population and Sampling

The population of interest in the present study was defined as young adults aged between 18 and 35 years who were German citizens or lived in Germany for more than ten years, had access to the internet, and consumed dark chocolate. Furthermore, target consumers should have their own SM accounts and follow at least one influencer. Screening questions were asked at the beginning of the study to ensure that only individuals belonging to the target population participated in the study. An online survey was created in Qualtrics and published through SM, instant messaging services, email, and Prolific to collect primary data. Prolific is an online platform tailored for academic research, providing researchers with access to a varied group of paid participants for studies. Regardless of the recruitment method, the study was conducted using the same online survey. This method of data collection method was chosen given that consumers active on the internet and SM are more likely to know about influencers and their brands than the remainder. Non-probability convenience sampling was implemented due to

time and cost constraints, implying that participants were chosen based on accessibility and willingness to respond rather than random selection from the target population.

3.3 Study Design

3.3.1 Conjoint Attributes, Levels, and Product Profiles

The conjoint analysis task entailed a within-subjects design with four factors in order to evaluate preferences for the different attribute combinations describing the product profiles shown to respondents. Four attributes with three levels were selected for product profiles, as depicted in Table 2.

Table 2: Overview of attributes and levels of dark chocolate bars (100 g) tested in the conjoint analysis task.

Attribute	Levels	Evidence
Cocoa content	85%, 70%, 50% (reference)	Edeka (2024); Rewe (2024); Alnatura (2024)
Type of sugar	Raw cane sugar, Coconut blossom sugar, Sugar (reference)	Alnatura (2024); De Pelsmaeker et al. (2017); Prada et al. (2021); Sipple et al. (2022)
Claim	Naturally sweetened, No Claim (reference)	Xiaomeng et al. (2014); Sipple et al. (2022); Parker et al. (2018)
Price	2.99€, 2.49€, 1.99€ (reference)	Edeka (2024); Rewe (2024); Alnatura (2024); Kiss et al. (2022)

Relevant price levels, cocoa content levels, types of sugar, and the presence of a naturally sweetened claim were identified, considering existing products in the German market and literature, as explained in the discussion section in the second chapter.

After the attributes and levels had been set, a stimulus set of hypothetical profiles was generated. The reason is that the total number of profiles, including 54 options resulting from all possible combinations of levels, would be too long and tiresome for respondents to score meaningfully. Hence, SPSS was used to compute an orthogonal design using a fraction of these profiles (Rao, 2005). Table 3 describes the nine product profiles evaluated by respondents in this study.

Table 3: Hypothetical dark chocolate bar (100 g) profiles evaluated by respondents.

Profile	Cocoa content	Type of sugar	Price	Claim
1	80	Coconut blossom	2.99	Yes
2	80	Raw cane	1.99	No
3	75	Sugar	2.99	No
4	75	Raw cane	2.49	Yes
5	75	Coconut blossom	1.99	Yes
6	50	Raw cane	2.99	Yes
7	50	Sugar	1.99	Yes
8	80	Sugar	2.49	Yes
9	50	Coconut blossom	2.49	No

Figure 3 depicts two examples of product profiles shown to respondents. Profile images were created with Canva, a free-to-use online graphic design tool.



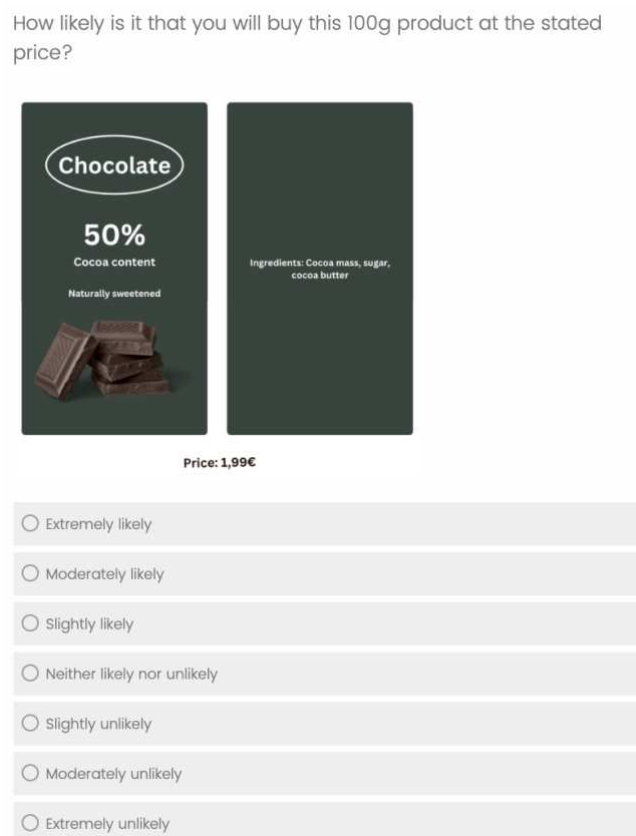
Figure 3: Examples of conjoint product profiles evaluated by respondents.

Images depicted both the front of the package, where the cocoa content and the naturally sweetened claim were shown, as well as the back of the package, where the list of ingredients, including the type of sugar used, was placed. The color of the chocolate pieces illustrating the package was adapted to the cocoa content in each profile to make the stimuli more realistic. The price was stated below each product profile.

3.3.2 Conjoint Task

Figure 4 illustrates the conjoint task completed by the survey participants. Respondents rated the likelihood of purchasing each of the nine product profiles on a labeled seven-point response scale (7 = “extremely likely”; 1= “extremely unlikely”). The order of presentation of product profiles was randomized across respondents.

How likely is it that you will buy this 100g product at the stated price?



The screenshot displays a conjoint task interface. At the top, a question asks: "How likely is it that you will buy this 100g product at the stated price?". Below the question are two side-by-side panels representing product profiles. The left panel is dark green and contains the text: "Chocolate" (circled), "50% Cocoa content", "Naturally sweetened", and an image of chocolate bars. The right panel is also dark green and contains the text: "Ingredients: Cocoa mass, sugar, cocoa butter". Below the panels, the price is listed as "Price: 1,99€". At the bottom, there is a vertical list of seven response options, each with a radio button: "Extremely likely", "Moderately likely", "Slightly likely", "Neither likely nor unlikely", "Slightly unlikely", "Moderately unlikely", and "Extremely unlikely".

Figure 4: Example of a conjoint task completed by respondents.

3.3.3 Information Treatment

One of the main objectives of this study was to understand whether the impact of attributes and attribute levels on preferences for dark chocolate bars varied between IBs and CBs. The type of brand was, therefore, experimentally manipulated between-subject, introduced as a moderator variable, and implemented as an information treatment. Figure 5 illustrates the two distinct scenarios presented to respondents before conducting the conjoint task in the online survey. Respondents were randomly allocated to one of two experimental conditions before completing the conjoint task in the survey. Conditions entailed the exposure to one of the two stimuli depicted in Figure 5.



Figure 5: Treatment conditions presented to respondents prior to the conjoint analysis task (left: influencer brand stimulus; right: corporate brand stimulus).

The stimuli were presented in a consistent format across both conditions to ensure that differences in consumer responses were only attributable to the treatment. The stimuli distinguished themselves from the rest of the survey content through their color scheme, featuring a dark brown background with light-colored text and underlined brand type to underscore the significance. The same four key attributes were emphasized in each stimulus to enhance readability and ensure comparability.

Furthermore, in designing the scenarios, the IB and CB presented needed to be comparable in terms of market reach and prominence within their respective spheres. The IB scenario showcased a generic food content specialist with a significant online following, establishing them as important in SM. Conversely, the CB scenario highlighted a generic company with a strong presence in sizeable German supermarket chains, emphasizing its important role in the traditional retail market. After evaluating the nine product profiles, respondents were asked to identify the type of brand from which the chocolates originated as part of a manipulation check.

3.3.4 Brand Familiarity and Evaluation

Upon completing the conjoint task, and in order to assess how brand familiarity might affect consumer preferences for dark chocolate, as well as any IB vs CB moderating effects, familiarity with a CB and an IB present in the German market, namely Lindt and Naturally Pam, was measured. These particular brands were chosen as representative examples within the premium chocolate market in Germany. Figure 6 depicts the images of the dark chocolate bars and the corresponding nutritional information shown to respondents. The order of presentation

was randomized across respondents. Respondents rated their familiarity with each brand on a six-point scale ranging from “never heard about it” to “consume it regularly”.



Figure 6: Naturally Pam and Lindt dark chocolate bars evaluated by respondents.

In addition, respondents were asked to score their perception of the tastiness, healthiness, naturalness, and perceived expensiveness of each of the dark chocolate bars using labeled seven-point response items (7=Strongly agree; 1=Strongly disagree). This within-subject design allowed for further testing of the effects of CB vs IB on consumer evaluations of dark chocolate bars, in addition to the main information treatment.

3.3.5 Other Variables Assessed

As food choices are impacted not only by extrinsic and intrinsic product attributes but also by biological, physiological, psychological, and sociocultural factors, additional preference drivers should be considered (Asioli et al., 2017; Köster, 2009). Consumer demographics and psychographics are also likely to determine their preferences for naturally sweetened snacks independently of product attributes. Examining these factors may provide crucial insights into consumer preferences, aiding in understanding behavior and developing targeted marketing strategies. In view of this, the online survey conducted in the scope of this thesis included psychometric measures of food-health awareness, naturalness, and SMI attachment and similarity, adapted from previously validated scales (Ragaert et al., 2004; Ki et al., 2020; Michel & Siegrist, 2019). Questions regarding relevant individual-level variables (e.g., demographics, behavioral) were likewise included at the end (see Appendix D).

3.4 Study Administration

The survey, including the conjoint analysis task, was administered online in German only through the Qualtrics platform between April 13 and May 6, 2024. Following informed consent, potential respondents were screened against population requirements. Respondents not meeting such requirements were forwarded to the end of the survey, and their data were excluded from analysis. Included respondents initiated the conjoint task after being randomly allocated to the between-subject condition and exposed to the corresponding information treatment. After this task, they completed a manipulation check and other measures of the variables of interest, after which they supplied data on sociodemographics and behavior characteristics, were thanked for their participation, and were dismissed.

3.5 Study Sample

A total of 266 potential respondents accessed the only survey, of which 163 came from the Prolific panel. Only 245 respondents completed the survey. The responses of 52 participants were excluded from the analysis as they were screened out of the survey for not meeting population requirements. Those of an additional 25 respondents were likewise excluded as they failed to pass the manipulation check. The study sample was, therefore, composed of 168 respondents, the social-demographic profile of which is detailed in Table 4.

Table 4: Socio-demographic profile of the study sample (n=168).

Age	
Mean [95% CI]	26.26 [25.65; 26.87]
Median [Min; Max]	26 [18; 35]
Gender	
Male	77 (45.8%)
Female	89 (53.0%)
Other responses	2 (1.2%)
Occupation	
Employed	75 (44.6%)
Student	73 (43.5%)
Unemployed	10 (6.0%)
Self-employed	5 (3.0%)
Other	5 (3.0%)

Income	
Low (Less than 1,000€)	48 (28.6%)
Medium (1,000€ - 3,999€)	70 (41.7%)
High (More than 3,999€)	40 (23.8%)
Did not want to say	10 (6.0%)
State	
North Germany (Hamburg, Bremen, Schleswig-Holstein, Niedersachsen, Mecklenburg-Vorpommern)	56 (33.3%)
South Germany (Bavaria, Baden-Württemberg)	43 (25.6%)
West Germany (Nordrhein-Westfalen, Hessen, Rheinland-Pfalz, Saarland)	43 (25.6%)
East Germany (Berlin, Brandenburg, Sachsen-Anhalt, Thüringen)	21 (12.5%)
Currently not living in Germany	5 (3.0%)

Slightly more women than men participated in the survey, with respondents' ages averaging around 26 years. The young age of the respondents was linked to the population requirements for the study sample. Due to a technical error in the survey programming, which was later corrected, 11 respondents did not record their ages. Therefore, the median per gender, 25 for women and 27 for men was taken and inserted where no data points were stated. A large majority of the respondents were students or employed, with more than 70 respondents for both cases. Geographically, respondents were evenly distributed across Germany, except for the east of Germany, where around 13% of respondents live. Regarding personal income, most respondents reported belonging to the middle-income bracket, with monthly gross earnings between 1,000 and 3,999€. This likely contributed to a moderate level of price sensitivity concerning dark chocolate.

Table 5 describes the food behavior and lifestyle characteristics of the respondents. Most of them followed a normal diet, followed by a meat and fish-free diet. More than two-thirds of the respondents did not have any diet restrictions, making the study findings more likely to be applicable to the general population. Most respondents valued exercising, with a sizeable share reportedly exercising several times per week. Considering SM usage, a large proportion of over 80% stated that they used SM channels two or more times in the last month, classifying them

as frequent users. This was crucial for the study as it was expected that consumers with high SM usage were more familiar with SMIs than the remainder. Dark chocolate was consumed more frequently than white or milk chocolate, indicating a preference for dark chocolate aligning with the shift towards natural, healthy snacking. Specifically, 15.5% of respondents consumed dark chocolate three or more times per week in the last month, which is higher compared to 1.8% for white chocolate and 8.3% for milk chocolate.

In the survey, four validated scales were employed to assess food health awareness, naturalness, SMI attachment, and SMI similarity. After evaluating Cronbach’s Alpha, SMI attachment and similarity were measured as one concept, indicating correlated mean items. The four statements measuring food health awareness had a low Cronbach’s Alpha of 0.472 due to a lack of variation, as over 89% of the young, active target population showed high agreement. Consequently, this scale was excluded from further analysis (see Appendix F). The findings show an average agreeableness score of 3 for SMI attachment and 4.73 for naturalness, indicating respondents are generally unattached to SMIs but give moderate to high importance to the naturalness of food.

Table 5: Food behavior and lifestyle characteristics of respondents (n=168)

Diets	
Normal	113 (67.3%)
Vegetarian / Vegan	48 (28.5%)
Other	7 (4.2%)
Restrictions	
No restrictions	132 (78.6%)
Food allergies	17 (10.1%)
Other	19 (11.3%)
Exercise	
Frequent (3 or more times per week)	65 (38.7%)
Moderate (1-2 times per week)	59 (35.1%)
Occasional (1-3 times per month)	28 (16.7%)
Did not exercise in the last month	16 (9.5%)

Social media usage	
Frequent (2 or more times per day)	136 (81.0%)
Moderate (5-7 times per week)	21 (12.5%)
Occasional (1-4 times per week)	9 (5.4%)
Infrequent (2-3 times per month)	1 (0.6%)
Did not want to say	1 (0.6%)
Chocolate consumption	
Dark chocolate	
Frequent (3 or more times per week)	26 (15.5%)
Moderate (1-2 times per week)	45 (26.8%)
Occasional (1-3 times per month)	82 (48.8%)
Did not consume in the last month	15 (8.9%)
White chocolate	
Frequent (3 or more times per week)	3 (1.8%)
Moderate (1-2 times per week)	16 (9.5%)
Occasional (1-3 times per month)	60 (35.7%)
Did not consume in the last month	89 (53.0%)
Milk chocolate	
Frequent (3 or more times per week)	14 (8.3%)
Moderate (1-2 times per week)	52 (31.0%)
Occasional (1-3 times per month)	71 (42.3%)
Did not consume in the last month	31 (18.5%)
SMI attachment	
Mean [95% CI]	3.00 [2.82; 3.18]
Median [Min; Max]	2.92 [1.00; 6.17]
Naturalness	
Mean [95% CI]	4.73 [4.57; 4.90]
Median [Min; Max]	4.94 [2.00; 7.00]

¹Responses provided on a labelled 7-point Likert-type scale (1=Strongly disagree; 4=Neither agree nor disagree; 7=Strongly agree).

The exclusion of potential study subjects due to failing the manipulation check did not cause any major imbalances in their random allocation to treatments, leaving 82 valid responses for the CB treatment and 86 valid responses for the IB treatment (see Appendix E).

3.6 Statistical Analysis

3.6.1 Descriptive Statistics

The first step in the analysis involved applying descriptive statistics to the collected data. This step was crucial for gaining an initial understanding of the distribution of both the dependent and independent variables. Frequencies and percentages were calculated for categorical variables, such as gender, to understand their distribution within the sample. For continuous variables, means, standard deviations, and 95% confidence intervals (CI) were computed to assess central tendencies and variability. This analysis provided insights into the sample population's demographics, food behavior, and lifestyle data, which was essential for ensuring the data was suitable and well-prepared for subsequent analyses.

3.6.2 Conjoint Analysis

To prepare the data for conjoint analysis, categorical product attribute levels were encoded using dummy variables, with one level designated as the reference case for comparison. The reference cases were sugar, 50% cocoa content, a price of €1.99, and CB. This encoding allowed the incorporation of categorical data, resulting in 1,512 observations (168 responses across nine product profiles). After, the conjoint analysis was conducted by running a multiple regression with the product evaluation as a dependent variable and all attributes and the treatment as independent variables. Thereby, each level's coefficient, called part-worths, was identified, indicating whether the attribute level adds to or subtracts from the preference (De Pelsmaecker et al., 2017). The following formula represents the basic conjoint analysis model:

$$U(X) = \sum_{i=1}^m \sum_{j=1}^{k_i} \alpha_{ij} X_{ij}$$

The utility, $U(X)$, represents the overall utility of a product profile, X , where m is the number of attributes, k_i the number of levels for attribute i , α_{ij} the utility associated with level j of attribute i , and X_{ij} is a binary indicator that is 1 if level j of attribute i is present and 0 otherwise. After running the regression and determining the part-worths, the relative importance of each attribute and the utility of each level can be derived (Rao, 2005).

3.6.3 Multivariate Regressions with Information Treatment and Other Predictors

By conducting an ANOVA, it was confirmed that the information presented prior to the conjoint task had an impact on profile evaluations (see Appendix I for test statistics). Indeed, the

willingness to buy dark chocolate from a CB was significantly higher than that of an IB. Notably, willingness to buy for profile three, representing a product with refined sugar, no claim of natural sweetening, a cocoa content of 75%, and a price of 2.99€, was significantly higher in the CB than the IB condition. Further, the analysis assessed whether the impact of attribute levels on dark chocolate preferences varies between IBs and CBs. Interaction terms were created by multiplying each attribute level variable with the treatment variable. These interaction terms were added to the multivariate regression model. Additionally, socio-demographic and lifestyle predictors were included in the model to account for their potential influence on consumers' preferences for dark chocolate. Attributes expected to impact consumer preferences were initially included in the regression model. Subsequently, attributes that did not show a significant impact were removed, resulting in a final model with only significant predictors. Two participants were excluded from the latter analysis because they did not provide gender information that could be classified in binary form.

4. Results and Discussion

4.1 Multivariate Regression Analysis

4.1.1 Conjoint Analysis

Table 6 presents the results of the multivariate regression analysis, which enters conjoint profile attribute levels as independent and the preference ratings of respondents as dependent variables (see Appendix J for test statistics).

Table 6: Results of the regression analysis with product attribute levels and treatment as independent variables (n=168).

Term	Coefficients			
	β -estimate	SEM	t-statistic	p-value
Intercept				
Sugar + 50% cocoa + claim + 1.99€ + corporate brand	4.182	0.127	33.041	<0.01
Type of sugar (reference: refined)				
Coconut blossom	0.262	0.098	2.678	0.007
Raw cane	0.147	0.098	1.501	0.133
Cocoa content (reference: 50%)				
75%	0.823	0.098	8.420	<0.01
80%	0.895	0.098	9.151	<0.01
Claim (reference: no claim)				
Naturally sweetened	0.070	0.085	0.832	0.406
Price (reference: 1.99€)				
2.49€	-0.863	0.098	-8.826	<0.01
2.99€	-1.246	0.098	-12.742	<0.01
Type of brand (reference: corporate)				
Influencer	-0.366	0.080	-4.585	<0.01

The regression model explains 16.8% of the variance in profile evaluations and is statistically significant. Considering the type of sugar, it can be concluded that coconut sugar positively impacts product evaluation while raw cane sugar does not. Further, attribute levels with 75% and 80% cocoa content are highly significant, with positive coefficients of 0.823 and 0.895, respectively. This indicates a strong preference for dark chocolate bars with higher cocoa content than those with lower cocoa content. Furthermore, in line with expectations, lower prices significantly negatively impact profile evaluations, with a price of 2.49€ and 2.99€,

showing negative coefficients of -0.863 and -1.246, respectively. The lower the price of the chocolate bar, the higher the willingness to buy the product. In contrast to existing studies, the naturally sweetened label does not significantly impact the willingness to buy dark chocolate. Finally, the treatment variable significantly negatively affects profile evaluation, suggesting that, relative to a CB, an IB was less preferred irrespectively of product attributes.

Figure 7 presents a visual representation of the results from the conjoint analysis. The first graph displays the regression correlation coefficients, representing the estimated part-worth utilities for each attribute level, facilitating easy comparison among them. The second graph illustrates the relative importance of each individual attribute. This is derived by rescaling the part-worth utilities from the regression analysis so that their total equals 100%, thereby quantifying the significance of each attribute in the overall analysis.

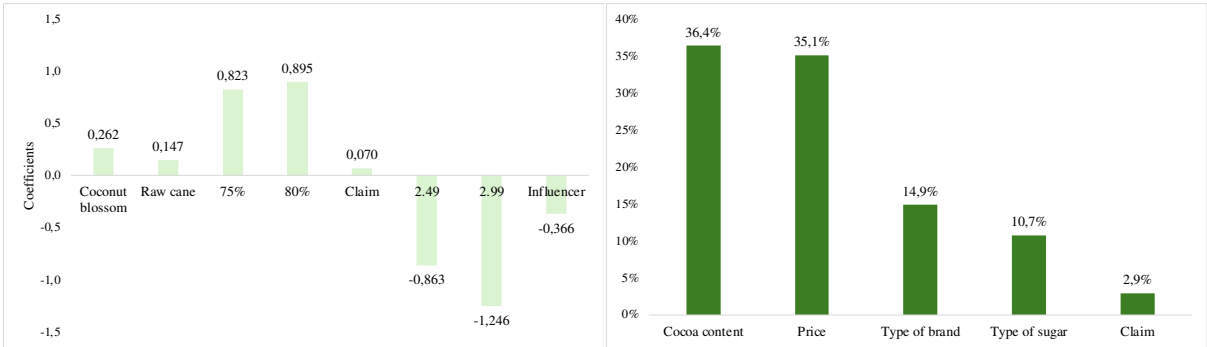


Figure 7: Plot of part-worth utilities per attribute level tested in the conjoint analysis (left). Plot of the relative importance of tested attributes in determining consumer preferences for dark chocolate (right) (n=168).

Cocoa content emerges as the most crucial factor. Price follows as the second most important attribute, with a relative importance of around 35%, highlighting its critical role in consumer decision-making. The treatment and type of sugar are less influential, with relative importance values of approximately 15% and 11%, respectively. Lastly, the natural sweetener claim holds minimal significance, having almost no impact on consumer preferences.

4.1.2 Multivariate Regression with Information Treatment

To answer the stated hypotheses, a multiple regression was conducted, including the attribute levels and the interactions between the treatment and attribute levels as independent variables and the respondents’ preference ratings as dependent variables (see Appendix J for test statistics). The regression model explains 16.8% of the variance in profile evaluation and is statistically significant. Results are shown in Table 7. Key findings show that the interactions

between the attribute levels and the treatment are insignificant. The impact of attributes and attribute levels on preferences for dark chocolate does not vary depending on the type of brand. Conducting a regression analysis per each type of brand reveals the same findings (see Appendix K for test statistics). The impact of the selected attributes, type of sugar, cocoa content, presence of a naturally sweetened claim, and the price does not vary depending on whether the chocolate is from an IB or CB.

Table 7: Results of the regression analysis with attribute levels, treatment, and their interactions as independent variables (n=168).

Term	β-estimate	SEM	t-statistic	p-value
Intercept				
Sugar + 50% cocoa + no claim + 1.99€ + corporate brand	4.138	0.172	24.094	<0.001
Type of sugar (reference: refined)				
Coconut blossom	0.293	0.140	2.087	0.037
Raw cane	0.203	0.140	1.449	0.147
Type of sugar * type of brand (reference: refined * corporate)				
Coconut blossom * influencer	-0.060	0.196	-0.307	0.759
Raw cane * influencer	-0.110	0.196	-0.562	0.574
Cocoa content (reference: 50%)				
75%	0.874	0.140	6.232	<0.001
80%	0.902	0.140	6.435	<0.001
Cocoa content * type of brand (reference: 50% * corporate)				
75% * influencer	-0.099	0.196	-0.504	0.614
80% * influencer	-0.015	0.196	-0.076	0.940
Claim (reference: no claim)				
Naturally sweetened	0.028	0.121	0.234	0.815
Claim * type of brand (reference: no claim * corporate)				
Naturally sweetened * influencer	0.082	0.170	0.483	0.629
Price (reference: 1.99€)				
2.49€	-0.858	0.140	-6.116	<0.001
2.99€	-1.183	0.140	-8.435	<0.001
Price * type of brand (reference: 1.99€ * corporate)				
2.49€ * influencer	-0.010	0.196	-0.054	0.957
2.99€ * influencer	-0.123	0.196	-0.629	0.529

Type of brand (reference: corporate)				
Influencer	-0.282	0.240	-1.173	0.241

4.1.3 Assessment of Socio-demographic and Lifestyle Predictors

Table 8 presents the results of a multiple regression analysis examining other factors potentially influencing consumer preferences for dark chocolate. The analysis included attribute levels and selected variables, namely age, gender, the interaction between age and gender, SMI attachment, and naturalness as independent variables (see Appendix J for test statistics). The model explains 20.1% of the variance in profile evaluation and is statistically significant.

Table 8: Results of the regression analysis with attribute levels and selected characteristics as independent variables (n=166).

Term	Coefficients			
	β -estimate	SEM	t-statistic	p-value
Intercept				
Sugar + 50% cocoa + no claim + 1.99€ + men	2.051	0.353	5.812	<0.001
Type of sugar (reference: refined)				
Coconut blossom	0.263	0.096	2.727	0.006
Raw cane	0.135	0.096	1.395	0.163
Cocoa content (reference: 50%)				
75%	0.821	0.096	8.515	<0.001
80%	0.896	0.096	9.286	<0.001
Claim (reference: no claim)				
Naturally sweetened	0.069	0.084	0.829	0.407
Price (reference: 1.99€)				
2.49€	-0.853	0.096	-8.848	<0.001
2.99€	-1.237	0.096	-12.825	<0.001
Others				
Age	0.026	0.010	2.550	0.011
Women (reference: men)	0.579	0.100	5.770	<0.001
Women * influencer brand (reference: men * corporate brand)	-0.424	0.109	-3.899	<0.001
Naturalness	0.168	0.038	4.441	<0.001
SMI attachment	0.090	0.035	2.567	0.010

Findings show that the age of the respondents has a small but significant positive effect, suggesting that older consumers tend to have slightly higher profile evaluations. Furthermore, findings show that gender is a significant predictor, with women rating the profiles significantly higher than men. Additionally, the interaction between gender and treatment shows that the effect of the treatment being an IB is less positive for women compared to men. Those findings were supported by considering the means for willingness to buy dark chocolate bars per gender and treatment, as shown in Table 9. Hence, women prefer dark chocolate from CBs over IBs, whereas the evaluation of men does not change based on the treatment. Finally, naturalness has a significant positive effect on the willingness to buy dark chocolate, likely due to its higher cocoa content compared to other chocolate types.

Table 9: Willingness to buy dark chocolate bars per gender and treatment (1=extremely unlikely; 7=extremely likely) (n=166).

Treatment	Gender	Willingness to buy (Mean [95% CI])
Corporate	Men	3.91 [3.55; 4.28]
	Women	4.49 [4.20; 4.77]
Influencer	Men	3.75 [3.45; 4.06]
	Women	3.99 [3.69; 4.31]

4.2 Familiarity and Evaluation of Marketed Influencer and Corporate Brands

Respondents had a high level of familiarity with Lindt chocolate, with approximately 60% reporting being regular consumers.. In contrast, familiarity with Naturally Pam was generally low. Only about 20% of respondents had high familiarity with Naturally Pam products, while nearly 80% were unfamiliar, having neither heard of nor consumed chocolate products sold under this brand.

Table 10: Frequencies of the degree of respondents' familiarity with Lindt and Naturally Pam (n=168).

Familiarity Lindt	n (%)
High	102 (60.7%)
Low	66 (39.9%)
Familiarity Naturally Pam	
High	35 (20.2%)
Low	134 (79.8%)

The perception of the two dark chocolates from the two brands was assessed regarding naturalness, taste, healthiness, and price. Table 11 presents the means and results of a paired-sample t-test used to test the significance of differences ($p < .05$) in the means of the four attributes between the two brands (see Appendix G for full analysis outputs).

Table 11: Means of perceptions of the taste, healthiness, naturalness, and expensiveness of a high-quality dark chocolate bar from a marketed corporate (Lindt) vs a marketed influencer brand (Naturally Pam) ($n=168$).

	Lindt Mean [95% CI]	Naturally Pam Mean [95% CI]	Paired t-test	Sig.
Perception				
Tasty ¹	5.64 [5.49; 5.79]	5.07 [4.90; 5.24]	-5.50	<.001
Healthy ¹	3.04 [2.83, 3.25]	3.37 [3.13; 3.61]	3.20	0.002
Natural ¹	4.37 [4.17, 4.57]	5.14 [4.96; 5.32]	6.83	<.001
Expensive ¹	5.44 [5.28, 5.60]	5.20 [5.02; 5.38]	-2.36	0.020

¹Responses provided on a labelled 7-point Likert-type scale (1=Strongly disagree; 4=Neither agree nor disagree; 7=Strongly agree).

In general, there was high agreement on the tastiness and expensiveness of both chocolate products, indicating that consumers found them to be delicious and expected them to be rather expensive. This can be explained by the fact that the products were dark chocolates belonging to the category of sweet snacks and that both brands are positioned in the premium market. The perception of naturalness was neutral to slightly positive on average. For Lindt, the naturalness attribute stood out, being lower than both price and taste but higher than healthiness. In contrast, for Naturally Pam, naturalness did not differ much from the attributes of price and taste. Finally, health perception was lower in both cases, suggesting that consumers expect dark chocolate products to have low health benefits due to their fat and sugar content. The findings confirm that tasty equals unhealthy for both products, aligning with Raghunathan et al. (2006), who found that the less healthy a food item is perceived to be, the better its inferred taste.

Results of the paired-sample t-test show that consumers perceive Naturally Pam as significantly more natural and healthy than Lindt. This perception aligns with the product formulation of Naturally Pam, which includes coconut blossom sugar instead of refined sugar. It confirms that IBs using natural sugar are seen as more natural than CBs using regular sugar. Further, as

Naturally Pam is a brand from the fitness influencer Pamela Reif, consumers likely associate products from her brand as healthier than those from corporates. In contrast, the Lindt product was perceived as tastier and more expensive than the Naturally Pam product. The Lindt product contains sugar consumers perceive as more delicious (Sipple et al., 2022; Prada et al., 2021). Furthermore, as Lindt is a known brand that has been in the market for many years, consumers may know about its positioning in the premium segment.

Four new variables were created by calculating the differences between the mean values of the two brands for each attribute, effectively highlighting the comparative perceptions. Defining product perception as the dependent variable, it was investigated whether perceptions were moderated by brand familiarity and brand treatment (see Appendix H for test statistics). Considering the treatment as moderator, the type of brand only impacts consumers' perception concerning the product's tastiness. Consumers exposed to the corporate treatment perceived Lindt as significantly tastier than consumers exposed to the influencer treatment. While Lindt is also perceived as tastier in the influencer treatment segment, the difference in taste perception between the two brands is smaller, indicating that Naturally Pam is perceived as relatively tastier under the influencer compared to the corporate treatment. The treatment does not affect the difference in health, naturalness, and price perception between the brands.

Using familiarity with Lindt as a moderator, findings show similar results to the treatment results (see Appendix H for test statistics). Consumers who are familiar with Lindt evaluated the product as significantly tastier than consumers who are not so familiar with the brand. In contrast, consumers with lower familiarity with Lindt had a more favorable taste perception of Naturally Pam. Finally, the level of familiarity with the brand Naturally Pam significantly influenced consumer perception of naturalness. Consumers perceived Naturally Pam as more natural than Lindt, especially if they were familiar with the brand. Treatment and familiarity with Lindt impacted consumer perception of tastiness, while familiarity with Naturally Pam impacted the perception of naturalness.

4.3 Discussion

In this thesis, a conjoint analysis research with an information treatment was conducted aiming to identify key drivers of preferences for dark chocolate bars and to assess whether those preferences vary depending on the type of brand (CB vs IB) respondents were exposed to.

Additionally, to investigate some of the main assumptions, familiarity with and perception of a chocolate product with a cocoa content of 70% from marketed CB and IB were assessed.

RQ1: Does the type of brand, the type of sugar, particularly from a natural source, the presence of a naturally sweetened label claim, the cocoa content, and the price level impact young German adults' preferences for dark chocolate bars, and if so, by how much?

Results show that the type of brand, type of sugar, the cocoa content, and the price significantly impact consumers' willingness to buy dark chocolate. Considering the type of brand, findings revealed that consumers are significantly more willing to buy dark chocolate from a CB than an IB. Studies show that knowledge of and familiarity with a brand strongly motivates purchase-related behavior (Ozretic-Dosen et al., 2007; Thaichon et al., 2018). Hence, consumers might be more familiar with the concept of CBs, potentially leading to higher trust and loyalty, impacting their preferences towards CBs. This is supported by another finding of this study focusing on marketed brands, showing that Lindt, being in the market for the long-term, is much better known than Naturally Pam. Although target consumers had a high SM usage, they were unattached and not involved with SMIs, which could further explain this finding. Furthermore, consumers prefer coconut blossom sugar over regular sugar, but this preference does not extend to raw cane sugar. One possible reason could be that refined white sugar is derived from sugar cane, leading to a lack of consumer awareness about the differences between regular sugar and raw cane sugar. Consumers perceive different natural sugars differently, influencing their preferences in distinct ways.

Established theories and prior research emphasized the perceived value of health-related claims on food packaging, suggesting that the most preferred sweetener claim was “naturally sweetened”, which is associated with higher overall liking and purchase intent. On the contrary, the findings of this study show that the naturally sweetened claim does not significantly impact consumer preferences for dark chocolate. This result could be due to the characteristics of the sample, which included young, educated adults who exercise frequently and value the naturalness of food. Hence, they may be more cautious about their food choices due to their higher skepticism toward promotional messaging. The results also suggest that the ingredients list shown on the BOP, including coconut sugar instead of regular sugar, significantly impacts consumers' preferences, whereas naturally sweetened claims shown on the FOP do not. This indicates a potential shift towards a more informed and evidence-based

approach among young German adults. Furthermore, consumers prefer a higher cocoa content in the product. Those findings are consistent with a growing consumer preference for less processed foods with natural ingredients, as outlined in Chapter 2. Finally, the price had a significant impact on consumer preferences. A lower price was preferred over a higher price, which aligns with previous studies (Del Prete & Samoggia, 2020; Kiss et al., 2022).

RQ2: Are there differences in the effects of these product attributes and their levels on consumer preferences when dark chocolate bars are manufactured and marketed by SMI rather than mainstream manufacturing brands?

Results show that whether consumers were exposed to a CB or an IB did not impact their preferences for dark chocolate, considering all four attributes. Hence, the first proposed hypothesis can be confirmed. Consumers indeed prefer dark chocolate bars with a higher cocoa content over those with lower cocoa content, regardless of the brand type, showing the increased demand for natural ingredients. However, the findings did not support the other hypotheses. The second hypothesis that consumers prefer dark chocolate bars with a natural sweetener claim over those without a natural sweetener claim, independent of the type of brand, needs to be rejected. Generally, consumers do not prefer dark chocolate with a naturally sweetened claim over products without a claim. The same applies to the third hypothesis, stating that consumers prefer dark chocolate bars with natural sugars over those containing refined sugar, with this effect being stronger for an IB compared to a CB. Although consumers prefer coconut blossom sugar over sugar, the result is the same for both brands, supporting that there is a potential shift towards a more informed and evidence-based approach among young German adults. Last but not least, while there was a clear preference for less expensive chocolates, this preference did not vary between CBs and IBs, contradicting the fourth hypothesis that price sensitivity would be influenced by brand type. Although influencer interactivity indirectly enhances brand loyalty and impacts consumers' willingness to pay, this effect might be offset by the strong influence of brand knowledge and familiarity on purchase behavior, potentially affecting the willingness to pay for CBs (Ozretic-Dosen et al., 2007; Jun & Yi, 2020; Fatma & Khan, 2024).

Additionally, to validate some of the main assumptions, familiarity with and perception of a chocolate product with a cocoa content of 70% from a known CB and IB were assessed. Results show that consumers were more familiar with the CB Lindt than with the IB Naturally Pam. The long-standing presence of Lindt in the market, compared to the relatively new concept of

IBs, likely contributed to this result. Lindt was seen as significantly tastier and more expensive due to the regular use of sugar in the product and its established position in the premium segment. Naturally Pam was viewed as more natural and healthy, which could be attributed to the use of coconut sugar in the product and its association with the German fitness influencer Pamela Reif.

5. Conclusion

5.1 Main Findings and Implications

Rising health awareness has driven demand for convenient, nutritionally balanced snacks. Consumer demand shifts to less processed foods with simple, transparent ingredient lists, reflecting a broader desire for natural food products (Oliveira do Nascimento et al., 2018; Asioli et al., 2017; Nielsen, 2015). Despite this shift towards healthier eating, global adult obesity rates have more than doubled since 1990, partly due to consuming high-energy-density snacks rich in sugar, salt, and fat, contributing to increased daily energy intake (World Health Organization, 2024). Ultra-processed foods accounted for over half of energy intake and nearly 90% of added sugars, significantly contributing to excess sugar intake (Steele et al., 2016). Considering this, companies started to develop and launch healthier, more natural, and less processed snacks, reaching a market size of 85.6 billion US dollars in 2021 (Grand et al., 2023).

This potential is not only leveraged by CBs but increasingly also by human brands, namely IBs. Influencers, often specializing in food or fitness content, launch their own food brands to meet consumer demand for healthier options. This study aimed to analyze consumer preferences for naturally sweetened snacks, specifically focusing on dark chocolate. Based on the literature review and market analysis, four relevant attributes, namely the type of sugar, the cocoa content, the presence of a naturally sweetened claim, and the price and corresponding levels, have been identified and considered for the conjoint study. Additionally, an information treatment was introduced to understand whether preferences for those attributes vary depending on the type of brand consumers were attached to.

A key finding of this conjoint analysis revealed that young German adults indeed prefer coconut blossom sugar over refined sugar, suggesting that natural sugar might impact consumers' willingness to buy dark chocolate. However, a naturally sweetened claim does not impact preferences. This finding uncovered that young German adults do not seem to prefer products that include a natural claim. Instead, they favor transparency and consider the list of ingredients placed at the back of the package. Furthermore, results show that consumers prefer dark chocolate with a higher cocoa content of 80% over products with a lower one. Finally, consumers prefer dark chocolate from CBs over IBs, likely due to greater familiarity and trust in established CBs, which drive purchase behavior and brand loyalty. This is evidenced by the marketed brand analysis, which shows higher recognition of the corporate brand Lindt

compared to the influencer brand Naturally Pam. Furthermore, there is a lack of strong attachment to SMI despite high SM usage among the sample.

The findings from the study conducted in this thesis are valuable to product marketers, product managers, and influencers who launch their brands, mainly when targeting young German adults. First, the type of sugar, specifically coconut sugar, significantly impacted the willingness to buy dark chocolate, being preferred over regular sugar. However, a naturally sweetened claim did not affect young German adults' preferences. This implies that brands should shift to developing new product lines featuring coconut sugar or reformulating existing products, replacing refined sugar with coconut sugar. However, since consumers expect products with natural sugar to be less tasty, brands should invest in research and development to ensure that the taste and quality of the product remain consistent. This change in product composition should be reflected in the marketing and communication strategies and campaigns, focusing on ingredients used in the product rather than on FOP claims. Second, as dark chocolate from CBs was preferred over dark chocolate from IBs, influencers who launch their brands must develop and execute marketing strategies to build brand awareness, loyalty, and trust with young German adults. Findings show that although influencers have a sizable number of followers and are known among SM users, it does not necessarily mean that their brand has a higher awareness and preference than CBs. Influencers are, therefore, advised to shift significant budgets to brand campaigns.

5.2 Limitations and Future Research

This thesis provides valuable insights into young German adults' preferences for dark chocolate, considering the type of brand as information treatment. Despite a thorough literature review, market analysis, and thorough preparation, execution, and analysis of the study, it is subject to several limitations. These limitations need to be addressed for a proper contextual understanding of the findings and guidance for future research. First, a self-administered online survey was used to collect data, introducing potential biases such as over-reporting or under-reporting behaviors and sampling bias due to a non-probability sampling method. To overcome this limitation, future research could employ other data collection methods, such as interviewer-administered surveys and a probability sampling method. Further, a large number of respondents is crucial for studies with an information treatment. Thus, a larger sample size could enhance the representativeness of the target population. Additionally, this study targeted young German adults who consume dark chocolate and use SM. Future research could diversify

the demographics to capture a broader scope and gain a better understanding. The study focused on dark chocolate and was conducted with a limited number of product attributes and levels. Expanding this research to other products, attributes, and attribute levels could provide a deeper understanding of consumer preferences. Future studies could consider investigating sensory attributes such as taste, which has been shown to be a crucial factor in chocolate purchasing and consumption (De Pelsmaeker et al., 2017; Del Prete & Samoggia, 2020). Although this study provided initial insights into consumers' familiarity and perceptions of a marketed IB and CB, it only assessed two specific brands. Future research could expand on these findings by investigating a broader range of different brands. Finally, while conjoint analysis is a robust method to assess consumer preferences, it operates on the assumption that consumers make rational choices based on available information. Considering this and that a fictitious product not existing in the market has been used for the conjoint task, this method may only partially capture the complexity of real-world decision-making with market products, which other factors can influence. Future research could incorporate cultural, economic, and situational factors and marketed products into the conjoint analysis to provide a more comprehensive understanding.

Reference List

- aboutfood. (2024). *aboutfood*. Retrieved March, 2024 from Süßes & Snacks:
<https://www.aboutfood.de/suesses-snacks>
- Ahrens, S. (2024, February 02). *Statista*. Retrieved May, 2024 from Pro-Kopf-Konsum von Zucker in Deutschland in den Jahren 1950/51 bis 2022/23:
<https://de.statista.com/statistik/daten/studie/175483/umfrage/pro-kopf-verbrauch-von-zucker-in-deutschland/>
- Alnatura. (2024). *Bio-Schokolade*. Retrieved March, 2024 from Alnatura:
<https://www.alnatura.de/de-de/produkte/alle-produkte/suesses-salziges/suessigkeiten/bio-schokolade/>
- Arshad, S., Rehman, T., Saif, S., Rajoka, M., Ranjha, M., Hassoun, A., . . . Aadil, R. (2022, September). Replacement of refined sugar by natural sweeteners: focus on potential health benefits. *Heliyon*, 8(9).
- Aschemann-Witzel, J., Varela, P., & Peschel, A. (2019, January). Consumers' categorization of food ingredients: Do consumers perceive them as 'clean label' producers expect? An exploration with projective mapping. *Food Quality and Preference*, 71, 117-128.
- Asioli, D., Aschemann-Witzel, J., Caputo, V., Vecchio, R., Annunziata, A., Næs, T., & Paula, V. (2017, September). Making sense of the "clean label" trends: A review of consumer food choice behavior and discussion of industry implications. *Food Research International*, 99(1), 58-71.
- Binninger, A. (2015, March). Perception of naturalness of food packaging and its role in consumer product evaluation. *Journal of Food Products Marketing*, 23(3), 1-17.
- Bolha, A., Blaznik, U., & Korošec, M. (2020, December). Influence of Intrinsic and Extrinsic Food Attributes on Consumers' Acceptance of Reformulated Food Products: a Systematic Review. *Slovenian Journal of Public Health*, 60(1), 72-78.
- Brownbill, A. L., Miller, C. L., & Braunack-Mayer, A. J. (2018, December). Industry use of 'better-for-you' features on labels of sugar-containing beverages. *Public Health Nutrition*, 21(18), 3335-3343.
- Cao, Y., & Miao, L. (2022, April). Consumer perception of clean food labels. *British Food Journal*, 125(4).
- Castro-Muñoz, R., Correa-Delgado, M., Córdova-Almeida, R., Lara-Nava, D., Chávez-Muñoz, M., Velásquez-Chávez, V., . . . Ahmad, M. (2022, February). Natural

- sweeteners: Sources, extraction and current uses in foods and food industries. *Food Chemistry*, 370.
- CBI. (2022, December 14). *What is the demand for cocoa on the European market?* Retrieved April, 2024 from CBI: <https://www.cbi.eu/market-information/cocoa/what-demand>
- Chaplin, K., & Smith, A. (2011, May). Definitions and perceptions of snacking. *Current Topics in Nutraceutical Research*, 9(1), 53-59.
- Chen, A., Kayrala, N., Trapeau, M., Aoun, M., & Bordenave, N. (2022, September). The clean label trend: An ineffective heuristic that disserves both consumers and the food industry? *Comprehensive Reviews in Food Science and Food Safety*, 21(6), 4921-4938.
- Close, A., Moulard, J., & Monroe, K. (2010, October). Establishing human brands: determinants of placement success for first faculty positions in marketing. *Journal of the Academy of Marketing Science*, 39, 922–941.
- Cowburn, G., & Stockley, L. (2005, March). Consumer understanding and use of nutrition labelling: A systematic review. *Public Health Nutrition*, 8(1), 21-28.
- Crofton, E., Markey, A., & Scannell, A. (2013, August). Consumers' expectations and needs towards healthy cereal based snacks: An exploratory study among Irish adults. *British Food Journal*, 115(8).
- Curi, P., Carvalho, C., Salgado, D., Pio, R., Pasqual, M., Souza, F., & Souza, V. (2017, July). Influence of different types of sugars in physalis jellies. *Food Science and Technology*, 37(3), 349-355.
- De Pelsmaeker, S., Schouteten, J., Lagast, S., Dewettinck, K., & Gellynck, X. (2017, December). Is taste the key driver for consumer preference? A conjoint analysis study. *Food Quality and Preference*, 62, 323-331.
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017, June). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828.
- Del Prete, M., & Samoggia, A. (2020, July). Chocolate consumption and purchasing behaviour review: research issues and insights for future research. *Sustainability*, 12(14), 5586.
- Devcich, D., Pedersen, I., & Petrie, K. (2007, May). You eat what you are: Modern health worries and the acceptance of natural and synthetic additives in functional foods. *Appetite*, 48(3), 333-337.

- Dickson-Spillmann, M., Siegrist, M., & Keller, C. (2011, January). Attitudes toward chemicals are associated with preference for natural food. *Food Quality and Preference*, 22(1), 149-156.
- Dijksterhuis, G. (2016, April). New product failure: Five potential sources discussed. *Trends in Food Science & Technology*, 50, 243-248.
- Dubé, L., Fatemi, H., Lu, J., & Hertzler, C. (2016, January). The healthier the tastier? USA–India comparison studies on consumer perception of a nutritious agricultural product at different food processing levels. *Frontiers in Public Health*, 4(6), 1-11.
- Edeka. (2024). *Tafelschokolade*. Retrieved March, 2024 from Edeka:
<https://www.edeka24.de/Lebensmittel/Suess-Salzig/Tafelschokolade/>
- Farivar, S., & Wang, F. (2021). Influencer Marketing: Current Knowledge and Research Agenda. *Digital Marketing & eCommerce Conference*, (pp. 201–208).
- Fatma, M., & Khan, I. (2024, February). Brand authenticity and consumers' willingness to pay a premium price (WPP): The mediating role of brand identification. *Journal of Brand Management*.
- Fink, M., Koller, M., Gartner, J., Floh, A., & Harms, R. (2020, May). Effective entrepreneurial marketing on Facebook – A longitudinal study. *Journal of Business Research*, 113, 149-157.
- Geysler, W. (2024, February 01). *From a mere \$1.7 billion at the time of this site's beginning in 2016, influencer marketing grew to have an estimated market size of \$16.4 billion in 2022. It was then predicted to jump a further 29% to an estimated \$21.1 billion in 2023. Despite these al.* Retrieved March, 2024 from Influencer Marketing Hub:
<https://influencermarketinghub.com/influencer-marketing-benchmark-report/#toc-9>
- Giertz, J., Hollebeek, L., Weiger, W., & Hammerschmidt, M. (2022, March). The invisible leash: when human brands hijack corporate brands' consumer relationships. *Journal of Service Management*, 33(3), 485-495.
- Graaf, C. (2006, July). Effects of snacks on energy intake: An evolutionary perspective. *Appetite*, 47(1), 18-23.
- Grand View Research. (2023). *Grand View Research*. Retrieved March, 2024 from Healthy Snacks Market Size & Share Analysis Report, 2030:
<https://www.grandviewresearch.com/industry-analysis/healthy-snack-market>
- Green, P., & Wind, Y. (1975, July). New way to measure consumers' judgments. *Harvard Business Review*, 53, 107–117.

- Grimmelt, A., Moulton, J., Pandya, C., & Snezhkova, N. (2022, October). *McKinsey*. Retrieved March, 2024 from Hungry and confused: The winding road to conscious eating: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/hungry-and-confused-the-winding-road-to-conscious-eating>
- Heide, F. (2022, October). *Creator Economy: Das sind die wichtigsten Influencer-Marken Deutschlands*. Retrieved March, 2024 from OMR: <https://omr.com/de/daily/creator-economy-creator-brands>
- Hunter, S., & Mattes, R. (2019, February). The Role of Eating Frequency and Snacking on Energy Intake and BMI. *Handbook of Eating and Drinking*, 659–678.
- IBM. (2020). *IBM SPSS Conjoint V27*. Retrieved March, 2024 from IBM: https://www.ibm.com/docs/en/SSLVMB_27.0.0/pdf/en/IBM_SPSS_Conjoint.pdf
- IMARC Group a. (2023, July). *Europe Natural Sweetener Market to Reach US\$ 8.1 Billion by 2032, Propelled by Rising Prevalence of Numerous Lifestyle Disorders*. Retrieved 2024, March from IMARC: <https://www.imarcgroup.com/natural-sweetener-market-europe>
- IMARC Group b. (2023). *Clean Label Ingredients Market Report by Type, Form, Application and Region 2024-2032*. Retrieved March, 2024 from IMARC: <https://www.imarcgroup.com/clean-label-ingredients-market>
- Ingredion. (2014). *The Clean Label Guide to Europe*.
- Ingredion. (2022). *Ingredion*. Retrieved May, 2024 from New research shows clean label food formulations can increase profits : <https://www.ingredion.com/apac/en-sg/news-events/news/new-research-clean-label-food-formulations-increase-profits.html>
- Jun, S., & Yi, J. (2020, July). What makes followers loyal? The role of influencer interactivity in building influencer brand equity. *Journal of Product & Brand Management*.
- Kaur, A., Scarborough, P., & Rayner, M. (2017, July). A systematic review, and meta-analyses, of the impact of health-related claims on dietary choices. *International Journal of Behavioral Nutrition and Physical Activity*, 14(1).
- Ki, C., Cuevas, L., Chong, S., & Lim, H. (2020, July). Influencer marketing: Social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs. *Journal of Retailing and Consumer Services*, 55.
- Kiss, M., Czine, P., Balogh, P., & Szakály, Z. (2022, October). The connection between manufacturer and private label brands and brand loyalty in chocolate bar buying decisions – A hybrid choice approach. *Appetite*, 177.

- KoRo. (2024). *Snacks*. Retrieved March, 2024 from KoRo:
<https://www.korodrogerie.de/snacks>
- Köster, E. (2009, March). Diversity in the determinants of food choice: A psychological perspective. *Food Quality and Preference*, 20(2), 70-82.
- Leung, F., Gu, F., & Palmatier, R. (2022, January). Online influencer marketing. *Journal of the Academy of Marketing Science*, 50, 226–251.
- Lou, C., Tan, S., & Chen, X. (2019, October). Investigating Consumer Engagement with Influencer- vs. Brand-Promoted Ads: The Roles of Source and Disclosure. *Journal of Interactive Advertising*, 19(3).
- Maruyama, S., Streletskaia, N., & Lim, J. (2021, January). Clean label: Why this ingredient but not that one? *Food Quality and Preference*, 87.
- Mayhew, A., Lock, K., Kelishadi, R., Swaminathan, S., Marcilio, C., Iqbal, R., . . . Chow, C. (2015, March). Nutrition labelling, marketing techniques, nutrition claims and health claims on chip and biscuit packages from sixteen countries. *Public Health Nutrition*, 19(6).
- Mellentin, J. (2020, November). *10 Key Trends in Food, Nutrition & Health 2023*. Retrieved March, 2024 from New Nutrition: <https://www.new-nutrition.com/keytrend?id=261>
- Merlino, V., Mota-Gutierrez, J., Borra, D., Brun, F., Cocolin, L., Blanc, S., & Massaglia, S. (2021, October). Chocolate culture: Preferences, emotional implications and awareness of Italian consumers. *International Journal of Gastronomy and Food Science*, 25.
- Mesías, F., Pulido, F., Escribano, M., Gaspar, P., Pulido, A., Escribano, A., & Rodríguez-Ledesma, A. (2013, April). Evaluation of new packaging formats for dry-cured meat products using conjoint analysis: An application to dry-cured Iberian Ham. *Journal of Sensory Studies*, 28(3), 238-247.
- Michel, F., & Siegrist, M. (2019, September). How should importance of naturalness be measured? A comparison of different scales. *Appetite*, 140, 298–304.
- Miller, R., Benelam, B., Stanner, S., & Buttriss, J. (2013, August). Is snacking good or bad for health: An overview. *Nutrition Bulletin*, 38, 302-322.
- Mondelēz International. (2022). *State of SnackinG: 2022 Global Consumer Snacking Trends Study*. Retrieved 2024, March from Mondelēz International:
<https://www.mondelezinternational.com/stateofsnacking/>
- Montagna, M., Diella, G., Triggiano, F., Caponio, G., De Giglio, O., Caggiano, G., . . . Portincasa, P. (2019, December). Chocolate, “Food of the Gods”: History, Science,

- and Human Health. *International Journal of Environmental Research and Public Health*, 16(24).
- Mundel, J., Huddleston, P., & Vodermeier, M. (2017, March). An exploratory study of consumers' perceptions: What are affordable luxuries? *Journal of Retailing and Consumer Services*, 35, 68-75.
- Negowetti, N., Ambwani, S., Karr, S., Rodgers, R., & Austin, B. (2021, July). Digging up the dirt on "clean" dietary labels: Public health considerations and opportunities for increased Federal oversight. *International Journal of Eating Disorders*, 55(1), 39-48.
- Nielsen. (2014, September). *Breakthrough innovation report*. Retrieved March, 2024 from Nielsen:
http://www.nielsen.com/content/dam/niensenglobal/eu/nielseninsights/pdfs/Breakthrough_Innovation_Report_EU_FINAL.pdf
- Nielsen. (2015, January). *We Are What We Eat, Healthy Eating Trends around the World*. Retrieved March, 2024 from Nielsen.
- Oliveira do Nascimento, K., Nascimento Dias Paes, S., & Augusta, I. (2018, May). A Review 'Clean Labeling': Applications of Natural Ingredients in Bakery Products. *Journal of Food and Nutrition Research*, 6(5), 285-294.
- Ozretic-Dosen, D., Skare, V., & Krupka, Z. (2007, February). Assessments of country of origin and brand cues in evaluating a Croatian, western and eastern European food product. *Journal of Business Research*, 60(2), 130-136.
- Parker, M., Lopetcharat, K., & Drake, M. (2018, October). Consumer acceptance of natural sweeteners in protein beverages. *Journal of Dairy Science*, 101(10), 8875-8889.
- Perkovic, S., Otterbring, T., Schärli, C., & Pachur, T. (2022, September). The perception of food products in adolescents, lay adults, and experts: a psychometric approach. *Journal of Experimental Psychology*, 28(3), 555-575.
- Petyaev, I., & Bashmakov, Y. (2017). Dark chocolate: Opportunity for an alliance between medical science and the food industry? *Frontiers in Nutrition*, 4(43).
- Piernas, C., & Popkin, B. (2010, February). Snacking Increased among U.S. Adults between 1977 and 2006. *Journal of Nutrition*, 140(2), 325-332.
- Prada, M., Saraiva, M., Serio, A., Coelho, S., Godinho, C., & Garrido, M. (2021). The impact of sugar-related claims on perceived healthfulness, caloric value and expected taste of food products. *Food Quality and Preference*, 94.

- Ragaert, P., Verbeke, W., Devlieghere, F., & Debevere, J. (2004, April). Consumer perception and choice of minimally processed vegetables and packaged fruits. *Food Quality and Preference*, 15(3), 259-270.
- Raghunathan, R., Naylor, R., & Hoyer, W. (2006, October). The Unhealthy = Tasty Intuition and Its Effects on Taste Inferences, Enjoyment, and Choice of Food Products. *Journal of Marketing*, 70(4), 170-184.
- Rao, V. (2014). *Applied Conjoint Analysis*. Ithaca, New York, United States of America: Springer.
- Reif, P. (2024). *Philosophie*. Retrieved March, 2024 from Naturally Pam: <https://www.naturally-pam.de/philosophie>
- Rewe. (2024). *Tafelschokolade*. Retrieved March, 2024 from Rewe: <https://shop.rewe.de/c/tafelschokolade/>
- Román, S., Sánchez-Siles, L., & Siegrist, M. (2017, September). The importance of food naturalness for consumers: Results of a systematic review. *Trends in Food Science & Technology*, 67(1), 44-57.
- Rozin, P., Fischler, C., & Shields-Argelès, C. (2012, October). European and American perspectives on the meaning of natural. *Appetite*, 59(2), 448-455.
- Ryan, M., & Hughes, J. (1997, June). Using Conjoint Analysis to Assess Women's Preferences for Miscarriage Management. *Health Economics*, 6(3), 217-324.
- Saboo, A., Kumar, V., & Ramani, G. (2016, September). Evaluating the Impact of Social Media Activities on Human Brand Sales. *International Journal of Research in Marketing*, 33(3), 524-541.
- Sanchez-Siles, L., Michel, F., Roman, S., Bernal, J., Philipsen, B., Haro, J., . . . Siegrist, M. (2019, September). The Food Naturalness Index (FNI): An integrative tool to measure the degree of food naturalness. *Trends in Food Science & Technology*, 91, 681-690.
- Saraiva, A., Carrascosa, C., Raheem, D., Ramos, F., & Raposo, A. (2020, September). Natural Sweeteners: The Relevance of Food Naturalness for Consumers, Food Security Aspects, Sustainability and Health Impacts. *International Journal of Environmental Research and Public Health*, 17(7).
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (Vol. 5). Harlow, Essex, England: Pearson Education Limited.
- Shahbandeh, M. (2024, March). *Cocoa production worldwide from 1980/81 to 2022/23*. Retrieved March, 2024 from Statista: <https://www-statista-com.eu1.proxy.openathens.net/statistics/262620/global-cocoa-production/>

- Sipple, L., Racette, C., Schiano, A., & Drake, M. (2022, January). Consumer perception of ice cream and frozen desserts in the “better-for-you” category. *Journal of Dairy Science*, *101*(1), 154-169.
- Stamer, H., & Hermann, D. (2006, January). Price segment stability in consumer goods categories. *Journal of Product & Brand Management*, *15*(1).
- Statista Research Department. (2022, February). *Ranking of the most popular snacks in Germany from 2018 to 2021*. Retrieved March, 2024 from Statista: <https://www-statista-com.eu1.proxy.openathens.net/statistics/757034/most-popular-snacks-germany/>
- Steele, E., Louzada, M., Mozaffarian, D., Monteiro, C., Moubarac, J., & Baraldi, L. (2016, March). Ultra-processed foods and added sugars in the US diet: Evidence from a nationally representative cross-sectional study. *BMJ Open*, *6*(3).
- Sweeney, E. (2017, December). *Study: 39% of Marketers Will Increase Influencer Marketing Budgets in 2018*. Retrieved March, 2024 from Marketing Dive: <https://www.marketingdive.com/news/study-39-of-marketers-will-increase-influencer-marketing-budgets-in-2018/512178/>
- Temple, N. (2019, October). Front-of-package food labels: A narrative review. *Appetite*, *144*.
- Thaichon, P., Jebarajakirthy, C., Tatu, P., & Gajbhay, R. (2018, February). Are You a Chocolate Lover? An Investigation of the Repurchase Behavior of Chocolate Consumers. *Journal of Food Products Marketing: innovations in food advertising, food promotion, food publicity, food sales promotion*, *24*(2), 163-176.
- Thomsen, M. (2006, July). Human Brands: Investigating Antecedents to Consumers’ Strong Attachments to Celebrities. *Journal of Marketing*, *70*(3).
- Torgerson, J., Sjöström, L., Lindroos, A., & Bertéus Forslund, H. (2005, April). Snacking frequency in relation to energy intake and food choices in obese men and women compared to a reference population. *International Journal of Obesity*, *29*, 711–719.
- Torster, K. (2023, March). *Fitness, Food und eine eigene App: So baut Influencerin Pamela Reif ihr Vermögen auf*. Retrieved 2024, March from Business Insider: <https://www.businessinsider.de/wirtschaft/influencer/vermoegen-pamela-reif-so-verdient-sie-ihr-geld/#:~:text=Das%20Unternehmen%20geh%C3%B6rt%20zu%2074,auch%20im%20station%C3%A4ren%20Einzelhandel%20erh%C3%A4ltlich.>
- Valuates Reports. (2021, January). *Natural Sweeteners Market Size is Projected to Reach USD 27,940 Million by 2026 at CAGR 3.7%*. Retrieved March, 2024 from PR











- Newshire: <https://www.prnewswire.com/in/news-releases/natural-sweeteners-market-size-is-projected-to-reach-usd-27-940-million-by-2026-at-cagr-3-7-valuation-reports-800066449.html>
- van Kleef, E., Hans, C., & Luning, P. (2005, April). Consumer research in the early stages of new product development: a critical review of methods and techniques. *Food Quality and Preference*, *16*(3), 181-201.
- van Til, J., Stiggelbout, A., & IJzerman, M. (2009, February). The effect of information on preferences stated in a choice-based conjoint analysis and Counseling. *Patient Education and Counseling*, *74*(2), 264-271.
- Vrontis, D., Makrides, A., Christofi, M., & Thrassou, A. (2017, January). Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies*, *45*(2).
- Wirtz, S. (2023, September). *Content Creator vs. Influencer: Die richtige Wahl für deine Social-Media-Strategie*. Retrieved March, 2024 from OMR: <https://omr.com/de/reviews/contenthub/content-creator-influencer>
- World Health Organization. (2015, March). *World Health Organization*. Retrieved March, 2024 from WHO calls on countries to reduce sugars intake among adults and children: <https://www.who.int/news/item/04-03-2015-who-calls-on-countries-to-reduce-sugars-intake-among-adults-and-children>
- World Health Organization. (2014, March). *Obesity and overweight*. Retrieved May, 2024 from World Health Organization: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- Xiaomeng, E., Kannapon, L., & Drake, M. (2014, July). Extrinsic Attributes That Influence Parents' Purchase of Chocolate Milk for Their Children. *Journal of Food Science*, *79*(7).
- Xu, B., & Zizza, C. (2012, February). Snacking Is Associated with Overall Diet Quality among Adults. *Journal of the Academy of Nutrition and Dietetics*, *112*(2), 291-296.

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Appendix A: Overview of Dark Chocolate Bars from Selected Supermarkets

 <p>Lindt Excellence Schokolade Edelbitter 100g (1 kg = 26,90 €)</p> <p>2,69 €</p>	 <p>Schogetten Zartbitter 100g (1 kg = 12,90 €)</p> <p>1,29 €</p>	 <p>REWE Bio Edel-Bitter Schokolade 100g 100g (1 kg = 13,90 €)</p> <p>1,39 €</p>	 <p>REWE Beste Wahl Schokolade Edel Bitter 100g (1 kg = 11,90 €)</p> <p>1,19 €</p>	 <p>Lindt Excellence Schokolade Edelbitter 100g (1 kg = 26,90 €)</p> <p>2,69 €</p>
 <p>Lindt Excellence Schokolade Edelbitter 100g (1 kg = 26,90 €)</p> <p>2,69 €</p>	 <p>Ritter Sport Halbbitter 100g (1 kg = 14,90 €)</p> <p>1,49 €</p>	 <p>Gepa Bio Edle Bitterschokolade 100g 100g (1 kg = 22,90 €)</p> <p>2,29 €</p>	 <p>Lindt Edelbitter Schokolade Mousse 150g (1 kg = 24,60 €)</p> <p>3,69 €</p>	 <p>REWE Bio Edel-Bitter-Schokolade 85% 100g 100g (1 kg = 13,90 €)</p> <p>1,39 €</p>

Source: Rewe (2024)

 <p>Vivani Feine Bitter 85 % Kakao 100 g (24,9 € / kg)</p> <p>2,49€ inkl. MwSt., zzgl. Liefergebühren</p> <p>ZUM PRODUKT</p> <p>Gesamtinhalt: 100 g</p>	 <p>Alnatura Edelbitter-Schokolade 87 % Kakao 80 g (22,38 € / kg)</p> <p>1,79€ inkl. MwSt., zzgl. Liefergebühren</p> <p>ZUM PRODUKT</p> <p>Gesamtinhalt: 80 g</p>	 <p>Alnatura Feine-Bitter-Schokolade 100 g (14,9 € / kg)</p> <p>1,49€ inkl. MwSt., zzgl. Liefergebühren</p> <p>ZUM PRODUKT</p> <p>Gesamtinhalt: 100 g</p>
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Source: Alnatura (2024)

Appendix B: Survey Flow in Qualtrics

Block: Survey Intro (2 Questions)

Standard: Screening Questions (4 Questions)

Branch: New Branch

If

If Are you a German citizen or have you been living in Germany for more than 10 years? No Is Selected

Or Are you between 18 and 35 years old? No Is Selected

Or Do you consume dark chocolate? No Is Selected

Or Do you have an own social media account and follow at least one influencer? No Is Selected

EndSurvey: Advanced

BlockRandomizer: 1 - Evenly Present Elements

Group: Influencer Conjoint

Standard: Intro Conjoint Influencer (1 Question)

Standard: Intro Conjoint Influencer General (1 Question)

BlockRandomizer: 9 - Evenly Present Elements

Standard: Profile 1 Influencer (1 Question)

Standard: Profile 2 Influencer (1 Question)

Standard: Profile 3 Influencer (1 Question)

Standard: Profile 4 Influencer (1 Question)

Standard: Profile 5 Influencer (1 Question)

Standard: Profile 6 Influencer (1 Question)

Standard: Profile 7 Influencer (1 Question)

Standard: Profile 8 Influencer (1 Question)

Standard: Profile 9 Influencer (1 Question)

Standard: Manipulation Check Influencer (1 Question)

Group: Conjoint Corporate

Standard: Intro Conjoint Corporate (1 Question)
Standard: Intro Conjoint Corporate General (1 Question)

BlockRandomizer: 9 - Evenly Present Elements

Standard: Profile 1 Corporate (1 Question)
Standard: Profile 2 Corporate (1 Question)
Standard: Profile 3 Corporate (1 Question)
Standard: Profile 4 Corporate (1 Question)
Standard: Profile 5 Corporate (1 Question)
Standard: Profile 6 Corporate (1 Question)
Standard: Profile 7 Corporate (1 Question)
Standard: Profile 8 Corporate (1 Question)
Standard: Profile 9 Corporate (1 Question)

Standard: Manipulation Check Corporate (1 Question)

BlockRandomizer: 2 - Evenly Present Elements

Standard: Product Perception and Familiarity Pam (2 Questions)
Standard: Product Perception and Familiarity Lindt (2 Questions)

BlockRandomizer: 3 - Evenly Present Elements

Standard: Food-Health Awareness (1 Question)
Standard: Naturalness (1 Question)
Standard: SMI Attachment (1 Question)
Standard: SMI Similarity (1 Question)

Standard: Other Variables (10 Questions)

Appendix C: Online Survey

Block: Survey Intro

I appreciate your interest and time in taking my survey about purchase intentions and preferences for chocolate.

I am conducting this study for my master's thesis at the Católica Lisbon School of Economics. The survey is expected to take around 10 minutes to complete.

Your participation is entirely voluntary. Your honest answers are crucial, and please be assured that the data collected will be treated confidentially and anonymously. The information will be used exclusively for research purposes as part of this thesis. Only aggregated results will be used to present the results.

Please answer the survey in one take without any interruptions. If you have any questions or comments, please get in touch with me at s-ahensel@ucp.pt.

By proceeding with this survey, you are giving your explicit consent to take part in this study.

Block: Screening Questions

SQ1 Are you a German citizen or have you been living in Germany for more than 10 years?

- Yes (1)
 - No (2)
-

SQ2 Are you between 18 and 35 years old?

- Yes (1)
 - No (2)
-

SQ3 Do you consume dark chocolate?

- Yes (1)
 - No (2)
-

SQ4 Do you have an own social media account and follow at least one influencer?

- Yes (1)
 - No (2)
-

Block: Intro Conjoint Influencer

- In the following section, you will see **different chocolates**
- The chocolates shown are all from an established and known **influencer brand**
- An influencer brand is a brand created and owned by a **social media influencer**
- The influencer is specialized in **food content** and has a sizeable network of **followers**

Block: Intro Conjoint Influencer General

Please evaluate now each chocolate independently, according to your preference.

It's important that you imagine yourself in a realistic shopping situation, where you would consider buying this type of product for the stated price and provide your preference accordingly.

Please view each chocolate carefully, consider all its characteristics, and give us your honest opinion.

Block: Profile 1 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
- Moderately likely (6)
- Slightly likely (5)
- Neither likely nor unlikely (4)
- Slightly unlikely (3)
- Moderately unlikely (2)
- Extremely unlikely (1)

Block: Profile 2 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
- Moderately likely (6)
- Slightly likely (5)
- Neither likely nor unlikely (4)
- Slightly unlikely (3)
- Moderately unlikely (2)
- Extremely unlikely (1)

Block: Profile 3 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 4 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 5 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 6 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 7 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 8 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 9 Influencer

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Manipulation Check Influencer

From what kind of brand were the chocolates you have just evaluated? This information was given to you before showing the chocolates.

- Influencer brand (1)
 - Corporate brand (99)
 - Lindt (99)
-

Block: Intro Conjoint Corporate

- In the following section, you will see **different chocolates**
- The chocolates shown are all from an established and known **corporate brand**
- A corporate brand is a brand created and owned by a **food manufacturing company**
- The company offers different chocolates in large German supermarket chains

Block: Intro Conjoint Corporate General

Please evaluate now each chocolate independently, according to your preference.

It's important that you imagine yourself in a realistic shopping situation, where you would consider buying this type of product for the stated price and provide your preference accordingly.

Please view each chocolate carefully, consider all its characteristics, and give us your honest opinion.

Block: Profile 1 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
- Moderately likely (6)
- Slightly likely (5)
- Neither likely nor unlikely (4)
- Slightly unlikely (3)
- Moderately unlikely (2)
- Extremely unlikely (1)

Block: Profile 2 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
- Moderately likely (6)
- Slightly likely (5)
- Neither likely nor unlikely (4)
- Slightly unlikely (3)
- Moderately unlikely (2)
- Extremely unlikely (1)

Block: Profile 3 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 4 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 5 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 6 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 7 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 8 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Profile 9 Corporate

How likely is it that you will buy this 100g product at the stated price?

- Extremely likely (7)
 - Moderately likely (6)
 - Slightly likely (5)
 - Neither likely nor unlikely (4)
 - Slightly unlikely (3)
 - Moderately unlikely (2)
 - Extremely unlikely (1)
-

Block: Manipulation Check Corporate

From what kind of brand were the chocolates you have just evaluated? This information was given to you before showing the chocolates.

- Influencer brand (99)
 - Corporate brand (1)
 - Lindt (99)
-

Block: Product Perception and Familiarity Pam

Q1 Please have a look at the given chocolate bar and view it carefully, consider all its characteristics, and give us your honest opinion about it.



Ingredients: Cocoa mass, cocoa butter, coconut blossom sugar 29 %

Nutritional values per 100g:

Energy (kJ)	2609
Energy (kcal)	623
Protein (g)	6,0
Fat (g)	51,8
of which saturated fatty acids (g)	32,9
Carbohydrates (g)	30,3
of which sugar (g)	26,1
Dietary fiber	6,0
Salt (g)	0,12

To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor disagree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)
This product is tasty. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is healthy. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is natural. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is expensive. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 How familiar are you with chocolate from the brand Naturally Pam?

- Never heard about it (1)
- I have heard about it, but never consumed it (2)
- Have consumed it once (3)
- Have consumed it several times (4)
- Consume it often (5)
- Consume it regularly (6)

Block: Product Perception and Familiarity Lindt

Q3 Please have a look at the given chocolate bar and view it carefully, consider all its characteristics, and give us your honest opinion about it.



Ingredients: Cocoa mass, sugar, cocoa butter, vanilla

Nutritional values per 100g:

Energy (kJ)	2350
Energy (kcal)	566
Protein (g)	9.5
Fat (g)	41,0
of which saturated fatty acids (g)	24,0
Carbohydrates (g)	34,0
of which sugar (g)	30,0
Salt (g)	0,1

To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor disagree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)
This product is tasty. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is healthy. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is natural. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This product is expensive. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 How familiar are you with chocolate from the brand Lindt?

- Never heard about it (1)
- I have heard about it, but never consumed it (2)
- Have consumed it once (3)
- Have consumed it several times (4)
- Consume it often (5)
- Consume it regularly (6)

Block: Food-Health Awareness

Q5 To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor disagree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)
I feel to have control over my own health. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food plays an important role for keeping me in good health. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know which food is healthy for me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My health is determined by the food I eat. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block: Naturalness

Q6 To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)

disagree
(4)

I make sure to buy products that are preferably free from artificial ingredients. (1)

I avoid food that contains preservatives. (2)

I avoid food that contains additives. (3)

It is important to me that foods contain as many natural ingredients as possible. (4)

I avoid highly processed foods. (5)

I prefer unprocessed foods over processed foods. (6)

I avoid food that contains artificial colors and flavors. (7)

I am worried about residues from chemicals in food. (8)

I avoid food that is made from genetically

modified
plants. (9)

Block: SMI Attachment

Q7 To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor disagree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)
I find social media influencers to be a part of me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel personally connected to social media influencers. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel emotionally attached to social media influencers. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block: SMI Similarity

Q8 To which extent do you agree to the following statements?

	Strongly agree (7)	Agree (6)	Somewhat agree (5)	Neither agree nor disagree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)
I find social media influencers to be quite a bit like me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find social media influencers to have similar tastes and preferences as me. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find social media influencers to have a lot in common with me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Block: Other Variables

Q9 How old are you?

▼ 18 (1) ... 35 (18)

Q10 With which gender to you identify most?

- Man (1)
 - Woman (2)
 - Other (3)
 - Don't want to say (99)
-

Q11 How would you describe your current occupation?

- Employed (1)
 - Unemployed (2)
 - Self-employed (3)
 - Student (4)
 - Retired (5)
 - Other (6)
 - Don't want to say (99)
-

Q12 Which federal state in Germany do you live in?

- Baden-Württemberg (1)
 - Bayern (2)
 - Berlin (3)
 - Brandenburg (4)
 - Bremen (5)
 - Hamburg (6)
 - Hessen (7)
 - Mecklenburg-Vorpommern (8)
 - Niedersachsen (9)
 - Nordrhein-Westfalen (10)
 - Rheinland-Pfalz (11)
 - Saarland (12)
 - Sachsen (13)
 - Sachsen-Anhalt (14)
 - Schleswig-Holstein (15)
 - Thüringen (16)
 - If you currently don't live in Germany, please indicate where you live (99)
-

Q13 What is your monthly income before taxes (gross income)?

- Less than 1.000€ (1)
 - 1.000€ - 2.499€ (2)
 - 2.500€ - 3.999€ (3)
 - 4.000€ - 5.499€ (4)
 - More than 5.500€ (5)
 - Don't want to say (99)
-

Q14 Diets Which of the following diets do you follow?

- Regular (1)
 - Vegetarian (2)
 - Vegan (3)
 - Paleo (4)
 - Other (5)
 - Don't want to say (99)
-

Q15 Which of the following dietary restrictions or health conditions impact your eating behavior do you have?

- Food allergies (1)
 - Diabetes (2)
 - Cholesterol (3)
 - Gastrointestinal diseases (4)
 - Eating disorders (5)
 - None of those (6)
 - Other (7)
 - Don't want to say (99)
-

Q16 How often have you exercised in the last month?

- Not at all (1)
 - Once last month (2)
 - 2-3 times in the last month (3)
 - Once per week (4)
 - 2 times per week (5)
 - 3-4 times per week (6)
 - 5-6 times per week (7)
 - More than six times per week (8)
 - Don't want to say (99)
-

Q17 How often have you used social media channels in the last month?

- 2-3 times in the last month (1)
 - 1-2 times per week (2)
 - 3-4 times per week (3)
 - 5-6 times per week (4)
 - Once per day (5)
 - 2-3 times per day (6)
 - 4-5 times per day (7)
 - 6 or more times per day (8)
 - Don't want to say (10)
-

Q18 How often have you consumed different types of chocolate in the last month?

	Not at all (1)	Once last month (2)	2-3 times in the last month (3)	Once per week (4)	2 times per week (5)	3-4 times per week (6)	5-6 times per week (7)	More than six times per week (8)	Don't want to say (99)
Dark chocolate (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White chocolate (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Milk chocolate (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix D: Overview of Other Variables

Question Number	Variable	Scale Type	Question
Q1	Naturally Pam Evaluation	Ordinal (Likert)	To what extent do you agree with the following statements?
Q2	Product Fam Pam	Ordinal Scale	How familiar are you with chocolate from the brand Naturally Pam?
Q3	Lindt Evaluation	Ordinal (Likert)	To what extent do you agree with the following statements?
Q4	Product Fam Lindt	Ordinal Scale	How familiar are you with chocolate from the brand Lindt?
Q5	Food-Health (Ragaert et al., 2004)	Ordinal (Likert)	To what extent do you agree with the following statements?
Q6	Naturalness (Michel & Siegrist, 2019)	Ordinal (Likert)	To what extent do you agree with the following statements?
Q7	SMI Attachment (Ki et al., 2020)	Ordinal (Likert)	To what extent do you agree with the following statements?
Q8	SMI Similarity (Ki et al., 2020)	Ordinal (Likert)	To what extent do you agree to the following statements?
Q9	Age	Ratio	How old are you?
Q10	Gender	Nominal	With which gender do you identify most?
Q11	Occupation	Nominal	How would you describe your current occupation?
Q12	State	Nominal	Which federal state in Germany do you live in?
Q13	Income	Ordinal	What is your monthly income before taxes (gross income)?
Q14	Diets	Nominal	Which of the following diets do you follow?
Q15	Restrictions	Nominal	Which of the following dietary restrictions or health conditions impact your eating behavior do you have?
Q16	Exercise	Ordinal	How often have you exercised in the last month?
Q17	Social media frequency	Ordinal	How often have you used social media channels in the last month?
Q18	Chocolate type consumption	Ordinal	How often have you consumed different types of chocolate in the last month?

Appendix E: Survey Completion, Screening, and Manipulation Check

	Number of respondents
Participants who opened the survey	266 (163 from Prolific)
Participants who did not start the survey	9
Participants who did not finish the survey	12
Participants who were excluded based on age, residence, dark chocolate consumption, and social media influencer following	22 (German), 2 (Age), 5 (Social Media), 23 (Dark Chocolate Consumption)
Participants who failed the manipulation check	12 for influencer treatment (9 corporate brand, 3 Lindt) 13 for corporate treatment (8 influencer brand, 5 Lindt)
Final Sample Size	168 valid responses (82 for corporate brands, 86 for influencer brands)

Appendix F: Naturalness and SMI Attachment - Reliability Test

Naturalness Scale:

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.905	.909	9

Inter-Item Correlation Matrix

	Naturalness – Ich achte darauf, Produkte zu kaufen, die möglichst frei von künstlichen Inhaltsstoffen sind.	Naturalness – Ich meide Lebensmittel, die Konservierungsmittel enthalten.	Naturalness – Ich meide Lebensmittel, die Zusatzstoffe einhalten.	Naturalness – Ich meide Lebensmittel, die künstliche Farb- und Aromastoffe enthalten.	Naturalness – Ich bin besorgt über die Rückstände von Chemikalien in Lebensmitteln.	Naturalness – Ich meide Lebensmittel, welche mit genetisch veränderten Pflanzen hergestellt wurden.	Naturalness – Mir ist es wichtig, dass Lebensmittel so viele natürliche Zutaten wie möglich enthalten.	Naturalness – Ich meide stark verarbeitete Lebensmittel.	Naturalness – Ich bevorzuge unverarbeitete Lebensmittel gegenüber verarbeiteten Lebensmitteln.
Naturalness – Ich achte darauf, Produkte zu kaufen, die möglichst frei von künstlichen Inhaltsstoffen sind.	1.000	.610	.711	.666	.500	.449	.675	.620	.513
Naturalness – Ich meide Lebensmittel, die Konservierungsmittel enthalten.	.610	1.000	.702	.591	.370	.488	.498	.606	.468
Naturalness – Ich meide Lebensmittel, die Zusatzstoffe einhalten.	.711	.702	1.000	.655	.528	.531	.632	.668	.478
Naturalness – Ich meide Lebensmittel, die künstliche Farb- und Aromastoffe enthalten.	.666	.591	.655	1.000	.500	.513	.507	.590	.423
Naturalness – Ich bin besorgt über die Rückstände von Chemikalien in Lebensmitteln.	.500	.370	.528	.500	1.000	.391	.425	.430	.357
Naturalness – Ich meide Lebensmittel, welche mit genetisch veränderten Pflanzen hergestellt wurden.	.449	.488	.531	.513	.391	1.000	.421	.356	.257
Naturalness – Mir ist es wichtig, dass Lebensmittel so viele natürliche Zutaten wie möglich enthalten.	.675	.498	.632	.507	.425	.421	1.000	.640	.579
Naturalness – Ich meide stark verarbeitete Lebensmittel.	.620	.606	.668	.590	.430	.356	.640	1.000	.620
Naturalness – Ich bevorzuge unverarbeitete Lebensmittel gegenüber verarbeiteten Lebensmitteln.	.513	.468	.478	.423	.357	.257	.579	.620	1.000

SMI Attachment and Similarity Scale:

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.876	.877	6

Inter-Item Correlation Matrix

	SMI Attachment – Für mich sind Social Media Influencer ein Teil von mir.	SMI Attachment – Ich fühle mich persönlich mit Social Media Influencern verbunden.	SMI Attachment – Ich fühle mich mit Social Media Influencern emotional verbunden.	SMI Similarity – Ich finde, dass Social Media Influencer mir ziemlich ähnlich sind.	SMI Similarity – Ich finde, dass Social Media Influencer einen ähnlichen Geschmack und ähnliche Vorlieben haben wie ich.	SMI Similarity – Ich finde, dass Social Media Influencer viel mit mir gemeinsam haben.
SMI Attachment – Für mich sind Social Media Influencer ein Teil von mir.	1.000	.607	.568	.545	.357	.505
SMI Attachment – Ich fühle mich persönlich mit Social Media Influencern verbunden.	.607	1.000	.774	.508	.351	.520
SMI Attachment – Ich fühle mich mit Social Media Influencern emotional verbunden.	.568	.774	1.000	.484	.393	.452
SMI Similarity – Ich finde, dass Social Media Influencer mir ziemlich ähnlich sind.	.545	.508	.484	1.000	.611	.816
SMI Similarity – Ich finde, dass Social Media Influencer einen ähnlichen Geschmack und ähnliche Vorlieben haben wie ich.	.357	.351	.393	.611	1.000	.641
SMI Similarity – Ich finde, dass Social Media Influencer viel mit mir gemeinsam haben.	.505	.520	.452	.816	.641	1.000

Appendix G: Perception Naturally Pam and Lindt - Paired-Samples T Test

Descriptive Statistics

	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean		Std. Deviation Statistic	Variance Statistic
					Statistic	Std. Error		
Naturally Pam Evaluation – Dieses Produkt ist lecker.	168	5	2	7	5.07	.087	1.127	1.271
Naturally Pam Evaluation – Dieses Produkt ist gesund.	168	6	1	7	3.37	.121	1.573	2.474
Naturally Pam Evaluation – Dieses Produkt ist natürlich.	168	5	2	7	5.14	.092	1.188	1.412
Naturally Pam Evaluation – Dieses Produkt ist teuer.	168	6	1	7	5.20	.091	1.181	1.396
Lindt Evaluation – Dieses Produkt ist lecker.	168	5	2	7	5.64	.078	1.011	1.021
Lindt Evaluation – Dieses Produkt ist gesund.	168	6	1	7	3.04	.109	1.407	1.980
Lindt Evaluation – Dieses Produkt ist natürlich.	168	5	2	7	4.37	.101	1.311	1.719
Lindt Evaluation – Dieses Produkt ist teuer.	168	6	1	7	5.44	.083	1.082	1.170
Valid N (listwise)	168							

Paired Samples Correlations

Pair	N	Correlation	Significance	
			One-Sided p	Two-Sided p
Pair 1 Naturally Pam Evaluation – Dieses Produkt ist lecker. & Lindt Evaluation – Dieses Produkt ist lecker.	168	.194	.006	.012
Pair 2 Naturally Pam Evaluation – Dieses Produkt ist gesund. & Lindt Evaluation – Dieses Produkt ist gesund.	168	.610	<.001	<.001
Pair 3 Naturally Pam Evaluation – Dieses Produkt ist natürlich. & Lindt Evaluation – Dieses Produkt ist natürlich.	168	.325	<.001	<.001
Pair 4 Naturally Pam Evaluation – Dieses Produkt ist teuer. & Lindt Evaluation – Dieses Produkt ist teuer.	168	.333	<.001	<.001

Paired Samples Test

Pair	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Significance	
				Lower	Upper			One-Sided p	Two-Sided p
Pair 1 Naturally Pam Evaluation – Dieses Produkt ist lecker. – Lindt Evaluation – Dieses Produkt ist lecker.	-.577	1.360	.105	-.785	-.370	-5.502	167	<.001	<.001
Pair 2 Naturally Pam Evaluation – Dieses Produkt ist gesund. – Lindt Evaluation – Dieses Produkt ist gesund.	.327	1.325	.102	.126	.529	3.204	167	<.001	.002
Pair 3 Naturally Pam Evaluation – Dieses Produkt ist natürlich. – Lindt Evaluation – Dieses Produkt ist natürlich.	.768	1.456	.112	.546	.990	6.836	167	<.001	<.001
Pair 4 Naturally Pam Evaluation – Dieses Produkt ist teuer. – Lindt Evaluation – Dieses Produkt ist teuer.	-.238	1.310	.101	-.438	-.039	-2.356	167	.010	.020

Appendix H: Familiarity and Treatment as Moderator for Perception - ANOVA

Familiarity Lindt:

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Diff_Health	Low	66	.2576	1.20653	.14851	-.0390	.5542	-4.00	3.00
	High	102	.3725	1.39959	.13858	.0976	.6475	-3.00	5.00
	Total	168	.3274	1.32456	.10219	.1256	.5291	-4.00	5.00
Diff_Natural	Low	66	.8333	1.31948	.16242	.5090	1.1577	-2.00	4.00
	High	102	.7255	1.54251	.15273	.4225	1.0285	-3.00	5.00
	Total	168	.7679	1.45583	.11232	.5461	.9896	-3.00	5.00
Diff_Tasty	Low	66	-.3030	1.14985	.14154	-.5857	-.0204	-3.00	2.00
	High	102	-.7549	1.45858	.14442	-1.0414	-.4684	-4.00	3.00
	Total	168	-.5774	1.36024	.10495	-.7846	-.3702	-4.00	3.00
Diff_Price	Low	66	-.2273	1.39002	.17110	-.5690	.1144	-4.00	3.00
	High	102	-.2451	1.26206	.12496	-.4930	.0028	-3.00	3.00
	Total	168	-.2381	1.30974	.10105	-.4376	-.0386	-4.00	3.00

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Diff_Health	Between Groups	.530	1	.530	.301	.584
	Within Groups	292.464	166	1.762		
	Total	292.994	167			
Diff_Natural	Between Groups	.466	1	.466	.219	.641
	Within Groups	353.480	166	2.129		
	Total	353.946	167			
Diff_Tasty	Between Groups	8.182	1	8.182	4.515	.035
	Within Groups	300.812	166	1.812		
	Total	308.994	167			
Diff_Price	Between Groups	.013	1	.013	.007	.932
	Within Groups	286.463	166	1.726		
	Total	286.476	167			

Familiarity Naturally Pam:

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Diff_Health	Low	134	.2687	1.31025	.11319	.0448	.4925	-4.00	5.00
	High	34	.5588	1.37491	.23579	.0791	1.0386	-2.00	3.00
	Total	168	.3274	1.32456	.10219	.1256	.5291	-4.00	5.00
Diff_Natural	Low	134	.6493	1.39417	.12044	.4110	.8875	-3.00	5.00
	High	34	1.2353	1.61543	.27704	.6716	1.7989	-2.00	4.00
	Total	168	.7679	1.45583	.11232	.5461	.9896	-3.00	5.00
Diff_Tasty	Low	134	-.6642	1.34301	.11602	-.8937	-.4347	-4.00	3.00
	High	34	-.2353	1.39390	.23905	-.7216	.2511	-4.00	2.00
	Total	168	-.5774	1.36024	.10495	-.7846	-.3702	-4.00	3.00
Diff_Price	Low	134	-.3284	1.30802	.11300	-.5519	-.1049	-4.00	3.00
	High	34	.1176	1.27362	.21842	-.3267	.5620	-3.00	3.00
	Total	168	-.2381	1.30974	.10105	-.4376	-.0386	-4.00	3.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Diff_Health	Between Groups	2.283	1	2.283	1.304	.255
	Within Groups	290.711	166	1.751		
	Total	292.994	167			
Diff_Natural	Between Groups	9.314	1	9.314	4.486	.036
	Within Groups	344.633	166	2.076		
	Total	353.946	167			
Diff_Tasty	Between Groups	4.988	1	4.988	2.724	.101
	Within Groups	304.006	166	1.831		
	Total	308.994	167			
Diff_Price	Between Groups	5.395	1	5.395	3.186	.076
	Within Groups	281.082	166	1.693		
	Total	286.476	167			

Treatment:

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Diff_Health	Corporate	82	.1707	1.38604	.15306	-.1338	.4753	-4.00	5.00
	Influencer	86	.4767	1.25301	.13512	.2081	.7454	-3.00	4.00
	Total	168	.3274	1.32456	.10219	.1256	.5291	-4.00	5.00
Diff_Natural	Corporate	82	.9146	1.52511	.16842	.5795	1.2497	-3.00	5.00
	Influencer	86	.6279	1.38093	.14891	.3318	.9240	-3.00	4.00
	Total	168	.7679	1.45583	.11232	.5461	.9896	-3.00	5.00
Diff_Tasty	Corporate	82	-.8171	1.43267	.15821	-1.1319	-.5023	-4.00	2.00
	Influencer	86	-.3488	1.25339	.13516	-.6176	-.0801	-4.00	3.00
	Total	168	-.5774	1.36024	.10495	-.7846	-.3702	-4.00	3.00
Diff_Price	Corporate	82	-.2317	1.25017	.13806	-.5064	.0430	-3.00	3.00
	Influencer	86	-.2442	1.37144	.14789	-.5382	.0499	-4.00	3.00
	Total	168	-.2381	1.30974	.10105	-.4376	-.0386	-4.00	3.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Diff_Health	Between Groups	3.931	1	3.931	2.257	.135
	Within Groups	289.063	166	1.741		
	Total	292.994	167			
Diff_Natural	Between Groups	3.451	1	3.451	1.634	.203
	Within Groups	350.495	166	2.111		
	Total	353.946	167			
Diff_Tasty	Between Groups	9.203	1	9.203	5.096	.025
	Within Groups	299.791	166	1.806		
	Total	308.994	167			
Diff_Price	Between Groups	.007	1	.007	.004	.951
	Within Groups	286.470	166	1.726		
	Total	286.476	167			

Appendix I: Treatment and Profile Evaluation - ANOVA

Total:

ANOVA					
Profile Evaluation					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.662	1	50.662	17.786	<.001
Within Groups	4301.004	1510	2.848		
Total	4351.666	1511			

Per Profile:

Descriptive Statistics ^a					
	N	Minimum	Maximum	Mean	Std. Deviation
Profile 1	86	1	7	3.74	1.737
Profile 2	86	1	7	4.84	1.548
Profile 3	86	1	6	3.33	1.410
Profile 4	86	1	7	3.93	1.470
Profile 5	86	1	7	5.01	1.402
Profile 6	86	1	6	2.79	1.415
Profile 7	86	1	7	3.93	1.509
Profile 8	86	1	7	4.02	1.680
Profile 9	86	1	7	3.22	1.529
Valid N (listwise)	86				

a. Treatment = Influencer

Descriptive Statistics ^a					
	N	Minimum	Maximum	Mean	Std. Deviation
Profile 1	82	1	7	4.15	1.708
Profile 2	82	2	7	5.24	1.599
Profile 3	82	1	6	3.83	1.639
Profile 4	82	2	7	4.35	1.486
Profile 5	82	2	7	5.37	1.478
Profile 6	82	1	6	3.22	1.587
Profile 7	82	1	7	4.13	1.538
Profile 8	82	1	7	4.24	1.544
Profile 9	82	1	7	3.57	1.685
Valid N (listwise)	82				

a. Treatment = Corporate

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Profile 1	Between Groups	6.789	1	6.789	2.288	.132
	Within Groups	492.616	166	2.968		
	Total	499.405	167			
Profile 2	Between Groups	6.943	1	6.943	2.805	.096
	Within Groups	410.843	166	2.475		
	Total	417.786	167			
Profile 3	Between Groups	10.649	1	10.649	4.574	.034
	Within Groups	386.493	166	2.328		
	Total	397.143	167			
Profile 4	Between Groups	7.526	1	7.526	3.448	.065
	Within Groups	362.325	166	2.183		
	Total	369.851	167			
Profile 5	Between Groups	5.267	1	5.267	2.542	.113
	Within Groups	344.013	166	2.072		
	Total	349.280	167			
Profile 6	Between Groups	7.719	1	7.719	3.423	.066
	Within Groups	374.281	166	2.255		
	Total	382.000	167			
Profile 7	Between Groups	1.745	1	1.745	.752	.387
	Within Groups	385.106	166	2.320		
	Total	386.851	167			
Profile 8	Between Groups	2.044	1	2.044	.783	.377
	Within Groups	433.075	166	2.609		
	Total	435.119	167			
Profile 9	Between Groups	5.208	1	5.208	2.016	.158
	Within Groups	428.863	166	2.584		
	Total	434.071	167			

Appendix J: Conjoint Results - Regression Analysis

Including Attributes and Treatment:

Model Summary					ANOVA ^a						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model	Sum of Squares	df	Mean Square	F	Sig.	
1	.409 ^a	.168	.163	1.552	1	Regression	729.607	8	91.201	37.844	<.001 ^b
						Residual	3622.059	1503	2.410		
						Total	4351.666	1511			

a. Predictors: (Constant), Treatment, Price 2.99, Clean label, Cocoa 80, Cane Sugar, Cocoa 75, Coconut Sugar, Price 2.49

a. Dependent Variable: Profile Evaluation

b. Predictors: (Constant), Treatment, Price 2.99, Clean label, Cocoa 80, Cane Sugar, Cocoa 75, Coconut Sugar, Price 2.49

Coefficients ^a												
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	4.182	.127		33.041	<.001						
	Coconut Sugar	.262	.098	.073	2.678	.007	.052	.069	.063	.750	1.333	
	Cane Sugar	.147	.098	.041	1.501	.133	.004	.039	.035	.750	1.333	
	Cocoa 75	.823	.098	.229	8.420	<.001	.104	.212	.198	.750	1.333	
	Cocoa 80	.895	.098	.249	9.151	<.001	.134	.230	.215	.750	1.333	
	Clean label	.070	.085	.020	.832	.406	.020	.021	.020	1.000	1.000	
	Price 2.49	-.863	.098	-.240	-8.826	<.001	-.067	-.222	-.208	.750	1.333	
	Price 2.99	-1.246	.098	-.346	-12.742	<.001	-.226	-.312	-.300	.750	1.333	
	Treatment	-.366	.080	-.108	-4.585	<.001	-.108	-.117	-.108	1.000	1.000	

a. Dependent Variable: Profile Evaluation

Including Attributes, Treatment, and Interactions:

Model Summary					ANOVA ^a						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model	Sum of Squares	df	Mean Square	F	Sig.	
1	.410 ^a	.168	.160	1.555	1	Regression	732.830	15	48.855	20.196	<.001 ^b
						Residual	3618.836	1496	2.419		
						Total	4351.666	1511			

a. Predictors: (Constant), Price2.99_Treatment, Clean label, Cocoa 80, Cane Sugar, Price2.49_Treatment, Cocoa75_Treatment, Coconut_Treatment, Price 2.99, Price 2.49, Coconut Sugar, Cocoa 75, Cocoa80_Treatment, Cane_Treatment, Claim_Treatment, Treatment

a. Dependent Variable: Profile Evaluation

b. Predictors: (Constant), Price2.99_Treatment, Clean label, Cocoa 80, Cane Sugar, Price2.49_Treatment, Cocoa75_Treatment, Coconut_Treatment, Price 2.99, Price 2.49, Coconut Sugar, Cocoa 75, Cocoa80_Treatment, Cane_Treatment, Claim_Treatment, Treatment

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.138	.172		24.094	<.001					
	Coconut Sugar	.293	.140	.081	2.087	.037	.052	.054	.049	.366	2.732
	Cane Sugar	.203	.140	.056	1.449	.147	.004	.037	.034	.366	2.732
	Cocoa 75	.874	.140	.243	6.232	<.001	.104	.159	.147	.366	2.732
	Cocoa 80	.902	.140	.251	6.435	<.001	.134	.164	.152	.366	2.732
	Clean label	.028	.121	.008	.234	.815	.020	.006	.006	.488	2.049
	Price 2.49	-.858	.140	-.238	-6.116	<.001	-.067	-.156	-.144	.366	2.732
	Price 2.99	-1.183	.140	-.329	-8.435	<.001	-.226	-.213	-.199	.366	2.732
	Treatment	-.282	.240	-.083	-1.173	.241	-.108	-.030	-.028	.111	9.000
	Coconut_Treatment	-.060	.196	-.013	-.307	.759	-.015	-.008	-.007	.294	3.398
	Cane_Treatment	-.110	.196	-.024	-.562	.574	-.052	-.015	-.013	.294	3.398
	Cocoa75_Treatment	-.099	.196	-.022	-.504	.614	.011	-.013	-.012	.294	3.398
	Cocoa80_Treatment	-.015	.196	-.003	-.076	.940	.041	-.002	-.002	.294	3.398
	Claim_Treatment	.082	.170	.023	.483	.629	-.060	.012	.011	.247	4.049
	Price2.49_Treatment	-.010	.196	-.002	-.054	.957	-.086	-.001	-.001	.294	3.398
	Price2.99_Treatment	-.123	.196	-.027	-.629	.529	-.203	-.016	-.015	.294	3.398

a. Dependent Variable: Profile Evaluation

Including Attributes, Treatment, Gender, and selected Interactions:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.448 ^a	.201	.194	1.522	.201	31.023	12	1481	<.001

a. Predictors: (Constant), Age_Rec, Price 2.99, Clean label, Cocoa 80, Cane Sugar, Naturalness, Gender_treatment, SMIAttach, Price 2.49, Cocoa 75, Coconut Sugar, Gender

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	862.277	12	71.856	31.023	<.001 ^b
	Residual	3430.331	1481	2.316		
	Total	4292.608	1493			

a. Dependent Variable: Profile Evaluation

b. Predictors: (Constant), Age_Rec, Price 2.99, Clean label, Cocoa 80, Cane Sugar, Naturalness, Gender_treatment, SMIAttach, Price 2.49, Cocoa 75, Coconut Sugar, Gender

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	2.051	.353			5.812	<.001						
	Coconut Sugar	.263	.096	.073		2.727	.006	.054	.071	.063	.750	1.333	
	Cane Sugar	.135	.096	.037		1.395	.163	.001	.036	.032	.750	1.333	
	Cocoa 75	.821	.096	.228		8.515	<.001	.104	.216	.198	.750	1.333	
	Cocoa 80	.896	.096	.249		9.286	<.001	.135	.235	.216	.750	1.333	
	Clean label	.069	.084	.019		.829	.407	.019	.022	.019	1.000	1.000	
	Price 2.49	-.853	.096	-.237		-8.848	<.001	-.065	-.224	-.206	.750	1.333	
	Price 2.99	-1.237	.096	-.344		-12.825	<.001	-.225	-.316	-.298	.750	1.333	
	Gender	.579	.100	.170		5.770	<.001	.124	.148	.134	.618	1.618	
	Gender_treatment	-.424	.109	-.110		-3.899	<.001	-.020	-.101	-.091	.683	1.463	
	Naturalness	.168	.038	.105		4.441	<.001	.139	.115	.103	.957	1.045	
	SMIAttach	.090	.035	.063		2.567	.010	.100	.067	.060	.891	1.122	
	Age_Rec	.026	.010	.062		2.550	.011	.031	.066	.059	.926	1.080	

a. Dependent Variable: Profile Evaluation

Appendix K: Conjoint Results - Regression Analysis per Treatment

Influencer:

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.409 ^b	.167	.160	1.526

a. Treatment = Influencer

b. Predictors: (Constant), Price 2.99, Clean label, Cocoa 80, Cane Sugar, Price 2.49, Cocoa 75, Coconut Sugar

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	357.742	7	51.106	21.958	<.001 ^c
	Residual	1782.816	766	2.327		
	Total	2140.558	773			

a. Treatment = Influencer

b. Dependent Variable: Profile Evaluation

c. Predictors: (Constant), Price 2.99, Clean label, Cocoa 80, Cane Sugar, Price 2.49, Cocoa 75, Coconut Sugar

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	3.857	.165		23.443	<.001						
	Coconut Sugar	.233	.134	.066	1.731	.084	.053	.062	.057	.750	1.333	
	Cane Sugar	.093	.134	.026	.693	.489	-.007	.025	.023	.750	1.333	
	Cocoa 75	.775	.134	.220	5.771	<.001	.094	.204	.190	.750	1.333	
	Cocoa 80	.888	.134	.252	6.608	<.001	.142	.232	.218	.750	1.333	
	Clean label	.110	.116	.031	.950	.343	.031	.034	.031	1.000	1.000	
	Price 2.49	-.868	.134	-.246	-6.464	<.001	-.061	-.227	-.213	.750	1.333	
	Price 2.99	-1.306	.134	-.370	-9.724	<.001	-.247	-.331	-.321	.750	1.333	

a. Treatment = Influencer

b. Dependent Variable: Profile Evaluation

Corporate:

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388 ^b	.150	.142	1.586

a. Treatment = Corporate

b. Predictors: (Constant), Price 2.99, Clean label, Cocoa 80, Cane Sugar, Price 2.49, Coconut Sugar, Cocoa 75

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	324.425	7	46.346	18.427	<.001 ^c
	Residual	1836.020	730	2.515		
	Total	2160.446	737			

a. Treatment = Corporate

b. Dependent Variable: Profile Evaluation

c. Predictors: (Constant), Price 2.99, Clean label, Cocoa 80, Cane Sugar, Price 2.49, Coconut Sugar, Cocoa 75

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.138	.175		23.629	<.001					
	Coconut Sugar	.293	.143	.081	2.047	.041	.053	.076	.070	.750	1.333
	Cane Sugar	.203	.143	.056	1.421	.156	.016	.053	.048	.750	1.333
	Cocoa 75	.874	.143	.241	6.112	<.001	.116	.221	.209	.750	1.333
	Cocoa 80	.902	.143	.249	6.311	<.001	.128	.227	.215	.750	1.333
	Clean label	.028	.124	.008	.230	.818	.008	.009	.008	1.000	1.000
	Price 2.49	-.858	.143	-.236	-5.998	<.001	-.073	-.217	-.205	.750	1.333
	Price 2.99	-1.183	.143	-.326	-8.272	<.001	-.208	-.293	-.282	.750	1.333

a. Treatment = Corporate

b. Dependent Variable: Profile Evaluation