

FIELD LAB ON DECIPHERING THE KEY ELEMENTS DRIVING GERMAN CONSUMER  
PERCEPTIONS AND PREFERENCES FOR FROZEN READY-TO-EAT MEALS  
- ASSESSING CONSUMER PREFERENCES

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## **Abstract**

The German frozen ready-to-eat (RTE) meals market is undergoing significant changes in product offerings, consumer perceptions, and preferences. The research gap created by a lack of insights into the German market is filled by identifying the factors influencing German consumers' choice of frozen RTE meals and focusing on generational differences. Quantitative results challenge literature and qualitative research, revealing new attributes as decision-makers. The findings show that independent brands excel in health and convenience, while private labels offer affordability. Frosta is the dominant brand across various demographics. This work offers insights for crafting successful product strategies and proposes future research implications.

Keywords: Marketing Research, Conjoint Analysis, Multidimensional Perceptual Map, Brand Perceptions, Brand Preference, Frozen Ready-to-Eat Meals, Consumer Preferences, Consumer Perceptions

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## Table of Contents

2.1 Market Overview .....	67
2.1.1 Key Terms and Definitions .....	67
2.1.2 Advantages and Disadvantages of Frozen Ready-to-Eat Meals .....	69
2.1.3 Historical Background and Evolution of the Market .....	69
2.1.4 Current Market Landscape .....	71
5.1 Conjoint Analysis Methodology .....	76
5.1.1 Selected Attributes and Levels .....	76
5.1.2 Revision, Selected Channels, and Data Processing .....	78
5.2 Analysis .....	66
5.2.1 Sample Viability Conjoint Analysis .....	66
5.2.2 Analysis Across Demographic Groups .....	68
5.2.3 Pivot Tables .....	76
5.2.4 Conjoint Simulation .....	78
5.2.5 Segmentation (Personas) .....	80
7.1 Discussion .....	96
7.2 Managerial Implications .....	104
7.3 Limitations and Implications for Future Research .....	108

**List of Figures**

Figure 1: The Decision-Making Process ..... 16

Figure 2: Survey Procedure as a Diagram.....51

Figure 3 : Multidimensional Perceptual Map.....54

## **List of Abbreviations**

BPM	Brand Personality Model
CA	Conjoint Analysis
CDM	Customer Decision Making
FCPM	Food Choice Process Model
GCSE	General Certificate of Secondary Education
Gen X	Generation X
Gen Y	Generation Y
Gen Z	Generation Z
PM	Perceptual Map
RTE	Ready-to-eat
TCV	Theory of Consumer Values

## List of Appendices

Appendix 1 – Size of the Frozen Food Market Worldwide from 2018 to 2026 .....	125
Appendix 2 – Distribution of the Frozen Food Market in Europe by Country (2020) .....	125
Appendix 3 – Ready-to-Eat Meals Revenue .....	126
Appendix 4 – Revenues of the Frozen Food Market in Germany from 1989 to 2022.....	126
Appendix 5 – Sales Volume Breakdown of the Frozen Food Market in Germany in 2020 to 2022, by Product Group .....	127
Appendix 6 – Frozen Food Sales in the United States in 2023, by Product Category.....	128
Appendix 7 – Sales of Frozen Ready-to-Eat Meals in Germany from 2011 to 2022 .....	128
Appendix 8 – Convenience Food – Price Per Unit in Germany .....	129
Appendix 9 – Ready-to-Eat Meals – Users by Age in Germany .....	129
Appendix 10 – Ready-to-Eat Meals – Users by Income in Germany .....	130
Appendix 11 – Ready-to-Eat Meals – Users by Gender in Germany .....	130
Appendix 12 – Overview of Selected Brands and their Ready-to-Eat Products.....	131
Appendix 58 – Attributes and Levels Overview .....	134
Appendix 59 – Attributes and Levels per Brand.....	135
Appendix 60 – Additional Questions .....	136
Appendix 61 – Report Tabs Conjoint.ly .....	137
Appendix 62 – Viable Participants.....	137
Appendix 63 – Time Series of Participation .....	137
Appendix 64 – Location Distribution of Participants .....	138
Appendix 65 – Age Demographics .....	138
Appendix 66 – Gender Demographics .....	138
Appendix 67 – Educational Demographics.....	139

Appendix 68 – Occupational Demographics.....	139
Appendix 69 – Frequency of Frozen Ready-to-Eat Meal .....	139
Appendix 70 – Living Arrangements.....	139
Appendix 71 – Brand Preferences.....	140
Appendix 72 – Attribute Preferences Across Brands.....	140
Appendix 73 – Average Attribute Preference Across Brands.....	141
Appendix 74 – Level Preferences Across Brands .....	142
Appendix 75 – Age Conjoint Analysis.....	145
Appendix 76 – Gender Conjoint Analysis .....	150
Appendix 77 – Education Conjoint Analysis .....	152
Appendix 78 – Occupation Conjoint Analysis.....	156
Appendix 79 – Living Arrangement Conjoint Analysis .....	160
Appendix 80 – Frozen RTE Meal Consumption Conjoint Analysis.....	163
Appendix 81 – Pivot Age x Frequency .....	167
Appendix 82 – ANOVA Results Comparing Different Demographic Groups on Their Consumption Frequency of Ready-To-Eat Meals .....	167
Appendix 83 – Pivot Gender x Frequency .....	168
Appendix 84 – Independent T-Test Results Comparing Two <i>Genders</i> in Their Consumption <i>Frequency</i> of Ready-To-Eat Meals .....	168
Appendix 85 – Pivot Education x Frequency.....	169
Appendix 86 – Pivot Occupation x Frequency .....	169
Appendix 87 – Pivot Living Arrangement x Frequency .....	169
Appendix 88 – Simulation Baseline.....	170
Appendix 89 - Simulation: Sensitivity to Brand Preferences .....	171

Appendix 90 - Simulation: Sensitivity to Price (per serving) in Frosta .....	171
Appendix 91 - Simulation: Sensitivity to Price (per serving) in Iglo.....	173
Appendix 92 - Simulation: Sensitivity to Price (per serving) in Ja! .....	174
Appendix 93 - Simulation: Sensitivity to Price (per serving) in Gut&Günstig .....	176
Appendix 94 – Conjoint.ly Personas.....	177
Appendix 95 – Personas Brand Preferences.....	178
Appendix 96 – Personas Attribute Preferences .....	179
Appendix 97 – Personas Level Preferences .....	180
Appendix 98 – Script for Consumer Interviews for Product Development .....	300
Appendix 100 – Desktop vs. Mobile Phone Layout .....	182

## **1. Introduction**

In a world where convenience is king, the global frozen RTE meals market is responding in kind, projected to balloon from a substantial US\$ 51.5 billion in 2023 to a staggering US\$ 122.4 billion by 2033, marking a significant shift in consumer eating habits towards RTE solutions (Choudhury 2023). It has revolutionized the concept of convenience by offering a variety of globally inspired home-cooked meals in their frozen form. This culinary offering which is available from a variety of brands in both physical stores and online, is designed to not only satisfy appetite but also to improve the overall experience of food preparation and eating.

As can be seen from the rising sales of frozen RTE meals in Germany over the last 10 years, frozen RTE meals are becoming increasingly popular in the general expanding frozen food market in Germany (Dti 2023a). These convenient meals have become an integral part of the nutritional landscape and have cemented their place in the nation's kitchen, with more than half of German households owning a freezer (Kölzer et al. 2019). As such, the market for frozen RTE meals is

## Group Part

representative of the changing consumption patterns in German gastronomy. However, the daily consumption of convenience foods should not be viewed uncritically, and differences in attitudes towards these frozen convenience foods are particularly evident between generations. Although the benefits of frozen foods are widely known and easily accessible, there is a common but overly generalized assumption that such foods are always loaded with unhealthy additives and preservatives that may extend shelf life but can be detrimental to health (Sreeya and Malavikaa 2019). While the trend of pre-made meals is on the rise, Germans traditionally prefer to cook for themselves and to have greater control over flavors and ingredients, which is confirmed by Reagin (2016). Furthermore, the consumption behavior of German consumers varies across generations. Based on a current study from 2023, 36% of German consumers of frozen RTE meals are Generation Y (Gen Y), followed by 33% of Generation X (Gen X) and 18% of Generation Z (Gen Z) (Statista Consumer Insights 2023). Additionally, the motivations for purchasing these products differ: Gen Z and Gen Y prefer frozen RTE meals because they are convenient and fit into their fast-paced lives. According to Cheung et al (2019) as well as Reagin (2016), these generations' preference for RTE meals is increasing, due to a wider choice of easy-to-prepare options and a strong interest in the quality and specific ingredients of their food. Conversely, baby boomers prefer home-cooked meals and are more likely to rate the nutritional value of RTE meals negatively, accounting for only 14% of German frozen RTE meals consumers (Statista Consumer Insights 2023). These generational differences in perceptions and practices related to frozen RTE meals underscore the complexity of the market and the diverse consumer base it serves.

There are numerous motivations for researching this topic. The innate preference for culinary delights that goes hand in hand with busy lifestyles often leads to the choice of frozen RTE meals. However, in today's society, people are often skeptical about these quick meals, which are often overlooked or dismissed as unhealthy. In addition, the frozen food sector serves as a microcosm

## Group Part

for changing societal behaviors and demonstrates how today's consumers navigate the tension between time constraints and the desire for diverse, high-quality foods. This sector presents an opportunity for examination, as it holds great potential to yield valuable insights into consumers' decision-making processes, preferences, and underlying principles guiding their food choices. However, despite its significance, there is a lack of comprehensive research that captures the nuances of consumer perceptions in the German context. Prior studies have frequently taken a global or product-centric perspective, failing to consider the pure frozen RTE meals market, leading to a gap in understanding the distinctive cultural and individual factors that sway German consumers' viewpoints on these products. This thesis aims to shed light on the profiles of frozen food consumers in Germany and identify the key factors that influence their choices, making a valuable contribution to both academic discourse and industry practice. The decision to focus exclusively on the German frozen RTE meals market is based on several strategic factors. First, despite the controversial perception, the Germans achieved record consumption last year and constant growth is expected (Dti 2023a). However, the German market struggles to implement international standards in terms of transparency and communication. For example, the Nutri-Score, which has been introduced in many EU countries, is a color-coded system for indicating the nutritional value of food on the front of the packaging (Dréano-Trécant et al. 2020; Peters and Verhagen 2022). The introduction and effectiveness of the Nutri-Score labeling system have been a major topic of debate in Germany and have been criticized for their methodology and the clarity of their ratings (Ferguson 2022). The implementation of the system has also caused problems in the frozen RTE meals sector, failing to increase transparency, and hampering the industry's efforts to find an internationally applicable solution highlighting the complexity of the German frozen RTE meals market. However, the food tech sector in Germany is experiencing significant growth with numerous start-ups reshaping the industry (Seedtable 2023). There is also a growing trend of

## Group Part

new companies entering the market offering frozen foods that are touted as healthier, despite using similar production processes to the established companies (see 2.1.4). In addition, the authors' backgrounds and networks are predominantly rooted in Germany, giving them unparalleled access to local market insights and data. This unique position allows for a deeper and more sophisticated understanding of German consumer behavior, preferences, and trends in the RTE sector. In addition, Germany is a significant and distinct market within Europe, characterized by unique consumer habits, regulatory frameworks, and culinary traditions. By focusing on this specific market, more targeted, relevant, and actionable insights can be gained. This focused approach will enable a comprehensive and detailed analysis of the German market.

As such, the complexities and driving forces behind consumer choices in the frozen RTE meals aisle are explored, reflecting not only their culinary preferences but also their lifestyle choices, health considerations, and cultural nuances. Thus, the aim of this Master thesis is to integrate insights from existing marketing research by critically evaluating academic papers and studies, coupled with the results of qualitative and quantitative research, to address the following research question: *What key elements drive German consumers' choices in frozen RTE meals, and how can insights into these factors be utilized to formulate a successful product strategy?* Deciphering the factors paves the way for more informed product development, marketing strategies, and overall business decisions that take into account the changing tastes and values of German consumers. This understanding fosters innovation and competitiveness within the industry, leading to industry growth. Additionally, this study provides consumers with a deeper understanding of their preferences and informs their decision-making process when selecting frozen RTE meals, leading to more knowledgeable and satisfying choices that align with their lifestyles and priorities. Finally, the academic community benefits from the expanded knowledge base presented in this thesis, potentially inspiring further research and investigation in this domain.

## Group Part

To establish a knowledge base, a comprehensive review of the existing marketing and food literature is conducted. A *literature review* is a systematic approach that seeks to address specific research questions by identifying, analyzing, and integrating results from different studies (Snyder 2019). To choose adequate literature, Okoli's (2015) steps to conduct a systematic literature review were consulted. Once the review's aim and keywords were identified, databases like Business Source Premier and Google Scholar were searched for relevant and high-ranked literature. First, key terms are defined and a market overview outlining the current trends and conditions affecting the industry is given, followed by an examination of consumer psychology. The discussion covers the customer journey, the decision-making process, in particular the food choice process model (FCPM), and finally the influencing factors at each of the three main stages of decision-making. In addition, a combination of qualitative and quantitative research methods was used to gain a comprehensive understanding, with these two approaches mutually reinforcing the analysis. The qualitative research consists of semi-structured individual *interviews* with a variety of industry and academic experts, as well as users and non-users of frozen RTE meals, to identify market trends, perceptions, and preferences. Conducting interviews is a frequently used qualitative data collection method to gain insights from another person's perspective. It is often utilized to collect preliminary data before designing a survey (Qu and Dumay 2011). The presentation of personas as well as expert and consumer interviews complement the literature research and create an additional knowledge base. To further elaborate and visualize German consumers' perceptions of frozen RTE meal brands, a *multidimensional perceptual map* (PM) is conducted. This analysis is designed to provide valuable insight into consumer attitudes toward brands or products through factor analysis using attribute-related ratings of competing brands (Schmalensee and Thisse 1988). During the analysis, four brands - Frosta, Iglo, Gut&Günstig, and Ja! - are tested on their perception of 17 chosen attributes. To understand how different demographics influence the perception of RTE

## Group Part

meals, a series of ANOVAs were applied to the data to uncover differences in perception between generations and different socioeconomic standards. Built upon the foundations of *conjoint analysis* (CA), the method for studying consumer preferences for frozen RTE meals aims to uncover how people consider different aspects of their decision-making process. A CA involves examining the trade-offs that consumers make when selecting a product from a range of competing options in the market (Auty 1995). This study delves into six key attributes - brand, price, cooking time, cooking method, meal type, and ingredients/nutritional value - with multiple levels each. The survey settings, including the incorporation of hypothetical offerings and strategic inclusion of brand, aim to ensure the robustness of the analysis, while participant data such as age, frozen meal consumption frequency, employment status, living arrangement, and schooling are collected to facilitate segmentation and interpretation of consumer preferences. The CA is also complemented by the application of an ANOVA. All key findings are then summarized and discussed in detail: First, CA challenges qualitative research, as CA introduces cooking method, size, and ingredients/nutritional value as key considerations, whereas qualitative research establishes price, convenience, and taste as decisive factors. Second, brand is an important factor in the perception of frozen food. Furthermore, the findings show that the independent brands Frosta and Iglo excel in health and convenience, while the private labels Gut&Günstig and Ja! offer affordability. Last, Frosta is the dominant brand across various demographics. Next, a successful *product strategy* adapted to the needs and demands of the different generations is developed, taking the challenges and weaknesses of the market into account. Finally, theoretical and managerial implications are derived, rounded off by limitations and future research.

## **2. Literature Review**

### **2.1 Market Overview**

#### 2.1.1 Key Terms and Definitions

*RTE meals* are culinary preparations that are fully cooked and can be consumed with minimal preparation efforts. These meals are created to provide maximum convenience for the consumer and are designed for people with busy lifestyles, limited cooking skills, or limited access to cooking facilities (Dottori et al. 2023, 1). RTE meals include a variety of foods such as salads, shelf-stable products, and microwavable meals, all of which fulfill the need for reduced meal preparation times (Dottori et al. 2023, 1).

*Frozen RTE meals* are a subset of prepared meals that have been fully arranged and cooked and then frozen to preserve their quality and extend shelf life. These meals only need to be reheated and are particularly suitable for people who want to combine the convenience of quick preparation with the benefits of longer storage (Sen, Antara, and Sen 2019). Unlike ready-to-cook foods such as frozen fish or meat that require some form of cooking, frozen RTE products are usually complete meals that have been frozen to preserve their nutritional value and flavor until they are reheated and served (Delgado and Sun 2000). The convenience factor is high with both types of meals, but ready-to-cook meals offer an experience closer to cooking from scratch, while RTE meals are all about instant satisfaction with minimal effort.

Consumption of frozen RTE meals spans multiple generations, highlighting the importance of understanding their distinct consumer behaviors. Recognizing and delineating the unique preferences and trends within each generation is critical to fully understanding this dynamic market landscape.

*Baby boomers (>59 years old)*: Born between 1946 and 1964, baby boomers are known for being a hard-working and disciplined generation. They value face-to-face communication and have a

## Group Part

strong work ethic. As consumers, baby boomers tend to prioritize quality and service over price and are less influenced by trends. They also tend to be skeptical of advertising and expect high-quality customer service (Fingerman et al. 2012; Parment 2013).

*Gen X (47-58 years old):* People born between 1965 and 1980 belong to Gen X. They are often referred to as the “middle child” of the generations because they have a mixture of the traditional values of their predecessors and a modern attitude. Gen X values a good work-life balance, is highly educated, and has high purchasing power. As consumers, they are brand loyal, prefer quality over price, and are more easily influenced by traditional advertising than Gen Y or Gen Z (Goldring and Azab 2021; Parment 2013).

*Gen Y (28-46 years old):* Born between 1981 and 1996, Gen Y (also referred to as millennials) grew up during the Internet boom. This generation values experiences over possessions and is often considered civic-minded with a strong sense of community both locally and globally. In terms of consumer behavior, they are known for their willingness to spend on technology and experiences, and they choose brands that can deliver convenience through digital channels (Johnson and Chattaraman 2019; Licsandru and Cui 2019).

*Gen Z (18-27 years old):* Born between the mid-1990s and early 2010s, Gen Z is the first generation to have grown up with the Internet and digital technologies from an early age. This has fostered a preference for digital communication and a competent use of technology. Gen Z's consumer behavior is marked by their emphasis on social issues, appreciation for authentic products, and preference for brands with a strong online presence. They are more pragmatic and financially focused than earlier generations, prioritize value for their money, and favor health and sustainability with environmentally friendly products (Goldring and Azab 2021; Lisboa, Vitorino, and Antunes 2022; Narayanan 2022).

## Group Part

### 2.1.2 Advantages and Disadvantages of Frozen Ready-to-Eat Meals

Frozen RTE meals bypass lengthy preparation and cooking processes, come in controlled portions that make diet management easier, and offer a variety of options for different taste buds and dietary restrictions (Sen, Antara, and Sen 2021). Freezing preserves food for longer periods, reducing food waste, and extending shelf life while maintaining quality (James and James 2016). Freezing usually beats canning and drying preserving the flavor and nutrients of fruits and vegetables for long periods of time (Hasani et al. 2022). It also allows companies to move large quantities of food over long distances (Peavey, Work, and Riley 1994). However, convenience can come at a price: The nutritional content of some meals may be compromised due to the preservatives used to extend shelf life, and frequent consumption can lead to excess sodium and additive intake (Hasani 2022). Texture and flavor can suffer from the freezing process, and the environmental impact of packaging is a growing concern, as many meals come in non-recyclable materials. Despite challenges, the industry is adapting, addressing sustainability issues, and emphasizing cleaner ingredient lists (Sreeya and Malavikaa 2019).

### 2.1.3 Historical Background and Evolution of the Market

#### Early Developments

The concept of frozen foods has its roots in the early 20th century. Clarence Birdseye invented a method of rapid freezing that allowed food to be preserved without significant loss of quality which revolutionized food storage and consumption patterns worldwide (Adam 1962; Potter 1986). The methods developed by Birdseye made it possible to preserve flavor, texture, and nutritional value and set the stage for the growth of the frozen food industry (Kurlansky 2014). In Germany, the frozen food market gained momentum post World War II, with technological advancements and increased consumer acceptance. The introduction of freezers in the 1950s and the growth of frozen

## Group Part

food retail in the 1970s are key turning points that led to the widespread adoption of frozen food in German homes (Dawson 2014; Jackson et al. 2018; Maldonado 2018).

### Market Evolution

The pandemic-induced shift to remote work and self-isolation initially spurred greater demand for RTE meal options, a trend that persisted post-pandemic as consumers developed a lasting preference for the convenience of frozen foods (Tirtawijaya et al. 2021). Lifestyle changes and globalization enhance the preference for these meals, given their longer shelf life (Çinar and Onbaşı 2021). The market is projected to hit \$282.5 billion by 2023, with frozen foods' nutritional longevity being a key factor (Sowmya and Samsai 2019; Çinar and Onbaşı 2021). Technological advancements and a push for sustainability in the cold supply chain also contribute to the sector's growth (Chaabane et al. 2022). The size of the worldwide frozen food market is anticipated to grow by more than 40% between 2018 and 2026, according to a study on the “Size of the frozen foods market worldwide from 2018 to 2026” realized by Statista in 2020. The market was estimated to be worth 260.8 billion dollars in 2018. The frozen food market is expected to reach 366.3 billion USD by 2026 (Statista 2020) (see Appendix 1). In 2023, it is expected that this market will generate US\$605.40 billion in revenue, with an anticipation to expand by 6.76% yearly (CAGR 2023-2028). Worldwide, China will generate the largest income (\$138 billion in 2023), being the most relevant region for this industry. Regarding the next year (2024), the volume of the market for convenience foods is anticipated to increase by 4.7% (Statista Market Insights 2023a). When it concerns RTE meals, China leads the world in revenue in October 2023 with 134 billion USD, followed by India with 64 billion, Japan with 63 billion, the United States with 46 billion, and the United Kingdom with 15 billion (Statista Market Insights 2023d). According to Gonçalves et al. (2023), there has been an increase in the consumption of frozen RTE meals in Western Europe in the last years. The primary cause for this change is that the eating habits of people have altered as a result of changes

## Group Part

in family structures, such as the increase in the proportion of single or living alone individuals, or just out of convenience. In 2023, the RTE meals market in Europe generated US\$84.68 billion in revenues until now, compared to last year (2022) the revenue increased by 6.6%. According to Statista Market Insights (2023a), the CAGR from 2023 to 2028 is expected to grow 5.28% every year. In terms of total frozen food sales in Europe, Germany had the largest market share at 19.1%, followed by the United Kingdom (17.03%), France (12.91%), and Italy (10.38%) (MRFR 2020) (see Appendix 2). This growth can be traced back to the demand for healthy, affordable, and convenient meal options in the face of busy lifestyles (see Appendix 3). The remarkable development of the RTE meals industry in Europe is driven by a number of important factors. The growing demand for convenient meals is influenced by a lack of cooking skills or time, as well as a large number of single-person households (Aceves-Martins, Denton, and de Roos 2023). In addition, the European market is experiencing a shift in demand toward plant-based products and meat substitutes, reflecting strong environmental and animal welfare concerns (Henn et al. 2022).

### 2.1.4 Current Market Landscape

#### Size, Revenue, and Customer Demographics

According to Statista Market Insights (2023c) in 2023, the RTE market in Germany has experienced spectacular revenue growth, with a notable 20.5% increase from 2021 to 2022. Based on projections, it seems that this segment will continue to develop until 2028, but at a slower rate each year (Statista Market Insights 2023c). Furthermore, a substantial increase in revenues within the frozen foods sector was also observed, notably occurring from 2021 to 2022, with figures escalating from 15.92 billion euros to 19.54 billion euros (Dti 2023b) (see Appendix 4). In 2022, the top-selling frozen food categories in Germany were as follows: 25.64% of sales accounted for baked goods, 12.82% for vegetables, 12.37% for frozen meals, and 12.04% for potatoes (Dti 2023c) (see Appendix 5). Conversely, in the United States, the top-selling frozen foods, in order, are pizza,

## Group Part

ice cream, single-serve dinners/entrees, frozen novelties, and processed chicken or chicken substitutes. Each of these categories individually contributes more than a billion dollars in sales. (Circana 2023) (see Appendix 6). Despite the growing influence of online channels, offline remains the primary choice for purchasing convenience foods, including RTE and frozen food, as projected by Statista Market Insights (2023b). Appendix 7 shows the total sales of frozen RTE meals (excluding frozen pizza) in Germany in the years 2011 to 2022. In 2022, 483,547 tons of frozen RTE meals were sold in Germany, which is more than in the previous year. There is a growing trend as well as a trend in the frequency of consumption, German consumers are eating more and more frozen RTE meals compared to previous years, but the majority of respondents remain skeptical (VuMA 2022a; Dti 2023a). In terms of price development between 2021 and 2022, there was a notable price increase from €5.15 to €6.10 per unit due to the impact of the COVID-19 pandemic. As Statista Market Insights (2023b) reports, this trend is expected to continue each year, culminating in an expected price of €7.08 per unit in 2028 (see Appendix 8). Concerning the consumer demographics for RTE meals, the generation with the highest proportion of buyers was Gen Y, constituting 36% of consumers, followed closely by Gen X with 33%. In contrast, Gen Z exhibited lower engagement with this meal type, accounting for 17% of the consumer base while baby boomers only accounted for 14% (see Appendix 9). Looking at the income profiles of consumers, it is evident that 38% belong to the low-income category, 32% are situated in the medium-income bracket, and 29% are categorized as high-income individuals, accounting for a relatively stable distribution (see Appendix 10). In terms of gender distribution, it is evenly distributed with 50% of consumers being male (see Appendix 11). Looking at household classification, 27% of respondents live in single households, followed by 26% of families and 25% living in couple households, indicating a broad market appeal for frozen RTE meals, catering to different household sizes and their unique needs (Statista Consumer Insights 2023).

## Group Part

### Product Types and Distribution Channels

The segmentation of Germany's frozen RTE meals market is evident in its product range and distribution methods. The store offers a wide selection of frozen RTE meals that mimic practically any home-cooked meal, featuring a variety of selections like “Nasi Goreng”, “Tagliatelle with Mushroom Sauce”, and “Chicken Paella”. It also sells meat, fish, seafood, pizza, potato products, and baked goods. Notably, due to their high quality and customizability, frozen bakery items have been leading the market in recent years (Statista 2023). Whilst frozen pizzas are becoming increasingly popular, particularly with younger demographics, this paper focuses on complete meals within the frozen food sector. The frozen pizza sector, with its specialized brands and unique players, stands apart and is excluded from this analysis to maintain relevance to the wider trends in the frozen food industry. A comprehensive list of RTE meals from the four selected brands can be found in Appendix 12.

Regarding distribution channels, the market is divided into offline and online channels. Offline channels, especially hypermarkets and supermarkets such as Edeka, Rewe, Aldi, Lidl, and Netto, constituted over 60% of the market in 2016 according to a market report by Hexa Research (Cooper 2018). Nonetheless, the online sector is poised for substantial growth, driven by the ease of online shopping and evolving consumer habits that favor the variety and competitive prices of online retail (Dannenberg et al. 2020; Fresh Plaza 2020; Seitz et al. 2017). Catalog ordering represents an alternative distribution channel, employed by entities such as Eismann or Bofrost. This method is categorized as direct sales and is therefore considered an offline channel. Despite the differences from traditional retail shops, catalog ordering does not mainly depend on Internet-based transactions, which is why it is classified as an offline channel. With catalog ordering, customers usually order by phone or by filling out a form in a physical catalogue, which is then delivered to their homes (Timoumi, Gangwar, and Mantrala 2022). It is a more traditional form of shopping

## Group Part

that predates online retailing. However, many of these companies also offer online ordering, which then overlaps with online sales channels, underscoring the hybrid nature of their business model (Bofrost 2023a; Eismann 2023).

### Key Players

A 2020 VuMA survey revealed that among German consumers, the most favored frozen product brands in household packs included Iglo, Käpt'n Iglo, McCain, and Frosta, with Wagner and Dr. Oetker also being popular for their pizza offerings, alongside confectionery brands like Coppenrath & Wiese. The data indicated that approximately 36.7% of the German-speaking population aged 14 and older had consumed frozen food products from Iglo within the past three months at the time of the survey. Additionally, private labels were highly favored, with a preference rate exceeding 50% (VuMA 2020). As pizza is excluded in this Master's thesis and only frozen RTE meals are considered, the primarily relevant brands are Iglo, Frosta, and the private labels.

Iglo Germany, a subsidiary operating since 1961, is a major player in the German frozen food sector. Iglo is headquartered in Hamburg and offers a wide assortment of products, including fish, vegetables, meat alternatives, various dishes, and vegan dietary options. The brand is known for its focus on quality and variety and aims to provide its customers with convenient and nutritious meal solutions (Iglo 2023).

Frosta AG differentiates itself on the German market with its “Purity Promise”, a unique concept for high-quality frozen RTE meals without additives. As the market leader in Germany, Frosta is active in several European countries and offers an extensive range of frozen meals (Frosta AG 2023). The company's business model includes not only the production of its own brand but also the development of products for other national and international customer brands through the COPACK service. In addition, Frosta's Foodservice division covers institutional needs and offers a tailor-made product range for canteens, hospitals, caterers, and other large organizations (Frosta

## Group Part

AG 2023). Their 2022 annual report reveals a remarkable 47.3% sales increase, totaling 268 million EUR in RTE meals and related categories (Frosta AG 2022).

Furthermore, private label products such as Rewe's Ja! and Edeka's Gut&Günstig have significantly impacted the market with their frozen RTE meals (VuMA 2020). These products were created by drawing inspiration from well-known brand lines and offering them at a more affordable price point. Discount chains such as Lidl, Penny (belongs to Rewe Group), and Aldi also feature similar frozen products under their private labels. This research will primarily examine Gut&Günstig and Ja! due to their broad range of products. As the most prominent and frequented supermarket chains in Germany, Rewe and Edeka not only have exclusive private labels available for purchase but also provide the widest variety of consumer products, including well-known, independent brands like Iglo and Frosta (VuMA 2022b).

Bofrost, founded in Germany in 1966, is another leading company in the German frozen food market. It specializes in delivering a wide range of frozen foods directly to customers' homes, a service provided by around 7,000 delivery drivers. Bofrost's range includes high-quality frozen food and ice cream and supplies over four million households across Europe. The company stands for quality, which is reflected in the strict control of the entire process, from the procurement of ingredients to the delivery of the finished products (Bofrost 2021; 2023b). Eismann, like Bofrost, emphasizes a direct-to-home delivery model as a fundamental component of their business, fostering robust customer relationships and offering personalized service. Additionally, Demeter, known for its biodynamic and organic certification, is becoming increasingly significant in the frozen RTE meals market as consumer demand for organic products continues to rise (Eyinate et al. 2021; Michels 2015).

Online sales of frozen RTE meals have experienced significant growth in Germany, driven by increasing demand for convenience among busy consumers. Germany is a perfect market for the

## Group Part

expansion of online grocery services because of its strong e-commerce infrastructure (Statista Market Insights 2023e). German customers value the convenience and time savings that come with placing an online order for frozen meals and having them delivered right to their homes. Companies like Every., Prep my Meal, or Juit are capitalizing on this by offering different menus and meal options to suit different dietary preferences and needs (Every Foods 2023; Juit 2023; prep my meal 2023). This sector is competitive as both local start-ups and established supermarkets are expanding their online presence to offer frozen RTE meal delivery in response to the consumer shift towards digital shopping.

## **5. Consumer Preferences**

### **5.1 Conjoint Analysis Methodology**

A CA is an extensively acknowledged and powerful research method used to understand consumer preferences and decision-making processes across diverse industries, including the food sector (Green and Srinivasan 1990). CA is predicated on the notion that individuals assess the worth or practicality of a product, service, or concept (whether actual or hypothetical) by aggregating the individual quantities of utility offered by each attribute (King, Labas, and Renaudin 2019; Kotler 2000). The research aims to assess the relative importance of different attributes and levels, such as brand, price, cooking time, etc., in the context of frozen RTE meals.

#### 5.1.1 Selected Attributes and Levels

For the CA, six key attributes with different respective levels relevant to frozen RTE meals were identified (see Appendix 58). These traits were derived from a comprehensive literature review and conducted interviews with industry and academic experts and consumers.

## Group Part

*Brand:* Four brands were assessed – Ja!, Frosta, Gut&Günstig, and Iglo. The inclusion of brands is supported by studies that show the influence of brands on consumer food choices (Bettman and Park 1980; Islam and Ullah 2010)

*Price:* Three price levels were chosen based on the actual price ranges in the German supermarkets to record various price sensitivities across brands – 2.99€, 3.99€, and 4.99€.

*Cooking Time:* Three realistic cooking times based on the German market offerings were considered – 5 minutes, 12 minutes, and 20 minutes. Cooking time is a vital attribute affecting consumer convenience (Hawa et al. 2014; Horning et al. 2017).

*Cooking Method:* Three cooking methods – pan, oven, and microwave – were selected based on current offerings to understand consumer preferences regarding convenience and taste.

*Meal Type:* Three meal types were included – comfort/convenience meals, health/fitness meals, and vegetarian/vegan meals. Consumer preferences are influenced by their dietary preferences and health concerns (Nestle et al. 1998, Rozin 1990).

*Ingredients/Nutritional Value:* Four levels were included– all-natural/organic emphasis, low-calorie/light option, no additives/flavor enhancers, and locally sourced/sustainable. The focus on ingredients aligns with the growing trend of health-conscious consumer choices (Hayakawa 2017).

*Meal Size:* Three levels were considered – Single Serving (Portion for 1), Couple Serving (Portion for 2), and Family Sized Serving (Portion for >3).

In order to enhance the reliability and applicability of the CA, specific survey parameters were carefully selected:

*Inclusion of Hypothetical Offerings:* Selecting hypothetical offers, such as a price level of 4.99 for Ja! products and fitness offerings, was a deliberate and intentional decision. The objective was to assess consumer preferences by considering attributes, without being limited by the existing product portfolio. This approach allows for uncovering underlying preferences and is in line with

## Group Part

CA methodology (Ben-Akiva, McFadden, and Train 2018; Manski et al. 1981). Appendix 59 shows that all levels for each attribute could be chosen and no combinations were eliminated.

*Relevance of Brand:* While the brand may not be the sole determinant in consumer choices, interviews, and prior research suggest its relevance in the context of frozen RTE meals. Strategically incorporating the brand into the study enables the identification of its comparative significance in relation to other attributes, hence adhering to well-established CA methodologies (Ben-Akiva, McFadden, and Train 2018; Manski et al. 1981).

In addition to attribute-based data, relevant participant information was gathered (see Appendix 60), including age, frequency of frozen RTE meal consumption, employment status, and educational degree. These demographic and psychographic variables are crucial in segmenting and interpreting consumer preferences (Green et al. 2001).

### 5.1.2 Revision, Selected Channels, and Data Processing

The survey was distributed through diverse channels, utilizing platforms like WhatsApp and “SurveyCircle”, as well as social media channels such as Instagram and LinkedIn. Notably, a targeted approach was employed to reach respondents without electronic means, such as elderly individuals in care homes, ensuring a more inclusive representation. The utilization of the Conjoint.ly software was crucial in facilitating survey administration as well as data processing. The software was utilized to gather responses, and subsequent data processing encompassed several procedures, such as establishing segments for crosstab data and creating baselines for simulation situations to guarantee comparability. Additionally, persona-specific data was gathered to refine insights. The implementation of Conjoint.ly enabled the generation of pivot tables, which were utilized to evaluate demographic inquiries in connection with the frequency of frozen RTE meals consumption. These pivot tables were given in absolute numbers by the Conjoint.ly software and to test the significance of differences in the pivot tables, an Analysis of Variance was computed

using SPSS. Variables with three or more groups were tested with an ANOVA, while for variables with two groups an independent t-test was applied. All these segments are parts of the Conjoint.ly software and can subsequently be analyzed (see Appendix 61). In the final stages, the compiled data and graphs were exported to Excel files for further analysis, including the calculation of averages to enrich the overall understanding of the study outcomes. The analysis section is structured based on the Conjoint.ly categories, starting off with reviewing the viable participants, and then delving deeper into the overall insights (including brand preferences, attribute preferences, and level preferences), the Crosstab data that shows the findings of differences among demographic groups and personas, to the simulation results and lastly the pivot tables.

## **5.2 Analysis**

### 5.2.1 Sample Viability Conjoint Analysis

Within the scope of the research, a total of 493 individuals engaged with the survey link, revealing intriguing insights into participant characteristics. It's noteworthy that 61.9% (305 individuals) initiated the survey by clicking on the link but, for various reasons, did not complete it. Delving deeper into the screening process, a further 1.4% of participants (7 individuals) were screened out in Q3, and 5.5% faced exclusion in Q4 (27 individuals). An additional 4.5% chose not to explore all available alternatives (22 individuals), while 0.2% (1 individual) completed the survey but exhibited minimal mouse activity. Another 0.6% (3 individuals) spent insufficient time on specific conjoint sets, leading to their exclusion. After navigating through these invalid entries (a total of 74.2%), 125 participants (25.8%) emerged as viable contributors (see Appendix 62) during the survey period, extending from October 24<sup>th</sup> to November 9<sup>th</sup>, encompassing 17 days. The distribution of responses was dynamic, with 76 collected in the initial week and 49 in the subsequent week (see Appendix 63).

Sara Christiansen

*Location:* Geographically, the respondents formed a diverse cohort (see Appendix 64), with 64.8% (81 individuals) hailing from Germany, 26.4% (33 individuals) from Portugal, 4% (5 individuals) representing various European locations, 4% from the USA, and 2% from Asia.

*Age:* A majority of 61.7% (77 individuals) belonged to the age bracket of 18-27 years. Notably, attempts were undertaken to achieve a varied representation across age groups; consequently, 12.8% (16 individuals) belonged to the age group of 28-46, 10.4% (13+1 individuals) fell within the age range of 47-58, and 14.4% (18 individuals) were aged 59 and older. A participant aged 47-58 was included in the age range (13+1 individuals) after selecting the incorrect age group and notifying the authors after completing the survey. The distribution of age groups is detailed in Appendix 65.

*Gender:* Gender distribution among participants closely mirrored a 50/50 split (see Appendix 66), with 54.4% female and 45.6% male respondents.

*Education:* Educational diversity was evident (see Appendix 67), with 3.2% having completed “Mittlere Reife” (GCSE), 8.8% holding an “Abitur” (A-Level/High school degree), 8% completing an “Ausbildung” (Apprenticeship), 33.6% attaining a bachelor's degree, and 45.6%, the majority, obtaining a Master's degree. Only 0.8% chose not to disclose their educational level.

*Occupation:* Participants occupied various roles (see Appendix 68), with 48% students, 36.8% employed individuals, 5.6% self-employed, and 5.6% retired. Strikingly, no participants reported being unemployed. An additional 4% preferred not to disclose their occupation.

*Frequency of Frozen RTE Meals Consumption:* When examining the dietary patterns of the participants (see Appendix 69), it was found that almost half of them consumed frozen RTE meals biweekly or more frequently. This category comprised 7.2% of individuals who consumed such meals two to four times per week, 15.2% who did so weekly, and the biggest proportion of 24.8% who consumed them every two weeks. Contrasting this, the second-largest group, constituting

Sara Christiansen

19.1%, indicated a consumption frequency of only every few months. A small proportion of respondents (16.8%) acknowledged rarely consuming frozen RTE meals. It's noteworthy that individuals who expressed an absolute aversion to such meals were identified and excluded from the survey starting from Q4, providing a more refined understanding of the attitudes towards frozen RTE meals consumption.

*Living Arrangements:* Diverse landscapes appeared upon examination of the individuals' living arrangements (see Appendix 70). A considerable 22.4% of respondents stated that they live alone, which demonstrates a strong sense of self-reliance. However, over 40% of the respondents reside in shared accommodation with their roommates, highlighting the widespread occurrence of communal living within the population under study. This finding is consistent with the proportion of students who responded (48%), as communal living is the preferred configuration among this particular cohort. Furthermore, 26.4% disclosed that they have a spouse and live in a two-person household. In addition, it is worth noting that 11.2% of the participants said that they live with family members, which serves to highlight the diverse range of social structures present in the sample.

### 5.2.2 Analysis Across Demographic Groups

CA intricately delves into three key categories: brand preferences, attribute importance, and preferences for attribute levels. This holistic approach allows for a comprehensive examination of consumer choices and sheds light on the underlying factors influencing decision-making. The violin chart (see Appendix 71) serves as a powerful tool for comparing brand preferences and discerning the variation in constituent concepts within the market. Each violin-shaped plot presents the scores of different feature combinations within each brand, with median values depicted as diamonds in the center. The width of each violin signifies the dispersion of scores for various concepts, providing insights into the diversity of preferences. A wider violin plot indicates a

broader range of concepts. In general, Frosta emerged as the most popular brand among participants in the surveyed frozen RTE meals market, followed by Iglo, Gut&Günstig, and lastly Ja!. This observation is evident in Appendix 44, where the median of each brand illustrates its popularity among the survey participants. Notably, the violins, while generally having similar widths, exhibit a slight exception for Ja!, which demonstrates a marginally larger width, indicating more diverse concepts spread across higher and lower utility.

The relative importance of attributes in the frozen RTE meals market was determined by ranking, both in terms of overall preferences and within specific demographic groups for each individual brand, with the values in these charts collectively summing up to 100%. The attribute preferences across all brands can be found in Appendix 72. Upon averaging the respective attribute preferences across all brands (see Appendix 73), the study revealed that the most critical attribute is the cooking method with 20% (convenience of cooking), closely followed by ingredients/nutritional value with 17.9% and meal size with 17.1%, thereby totaling to 55% out of the 100%.

In the exploration of preferences for levels, additional data was collected and analyzed through charts. Within these charts (see Appendix 74), values are 0-centered for each attribute, providing a comparative perspective on preferences for levels. Positive values indicate relatively high preferences, while negative values indicate relative dislike. The preferences for the levels were analyzed both brand-specifically for each of the four brands and collectively, whereby the results were averaged across these four brands to determine the overall preferences.

The preferred cooking time across all brands was five minutes, in terms of cooking method the oven was favored for the independent brands Iglo and Frosta, while the pan was preferred for Ja! and Gut&Günstig. Regarding meal types, healthy/fitness meals were strongly favored for independent brands, while vegetarian/vegan options were chosen for private labels. The participants preferred locally sourced/sustainable ingredients for Frosta and Gut&Günstig, with

Sara Christiansen

Iglo and Ja! purchases participants leaned towards an all-natural/organic emphasis. Interestingly, respondents consistently preferred the cheapest option per serving, but higher prices for premium brands have lower negative utilities. Regardless of brand, couple-sized meals were the preferred meal size across the board.

### *Age*

Generally, the frozen RTE meals industry revealed nuanced patterns across generations (see Appendix 75), with distinct trends such as cooking method and ingredient preferences for Gen Y and Gen Z, varied brand-specific attributes preferred by Gen X, and a focus on convenience and cooking method for baby boomers. Frosta emerged as the predominant brand choice, with a noteworthy exception among Gen Y participants favoring Iglo slightly. Notably, Frosta enjoys the highest positive utility scores, particularly among consumers aged 47 and above, reflecting its broad appeal in older demographics. In contrast, Gut&Günstig and Ja! consistently exhibit negative utility scores, indicating a persistent unfavorable preference compared to Frosta and Iglo. The analysis underscored the significance of brand in decision-making, especially among seniors, with Ja! and Frosta displaying the highest volatility in preferences among the baby boomers. Strong volatility within age groups reveals pronounced brand preferences and aversions. While attribute preferences varied among brands, the differences were not extreme. For Gen Z consumers, top attributes included cooking method and ingredients/nutritional values, emphasizing oven and pan usage, all-natural/organic, and locally sourced/sustainable ingredients. This trend persisted in the Gen Y group. In contrast, the Gen X group displayed diverse preferences across brands, with each brand having a favorite attribute. For the baby boomers, convenience and cooking method are paramount, with the oven and pan being the most popular choices.

In the analysis of Frosta, the cooking method consistently emerged as the top priority across age groups, except for Gen X, where meal size took precedence. A preferred five-minute cooking time

Sara Christiansen

was noted, along with a preference for health-conscious, locally sourced meals. For Iglo, ingredient/nutritional value was paramount, except for baby boomers who prioritize meal size, particularly favoring couple-sized portions. Among younger age groups, an emphasis on all-natural/organic options was prevalent. Ja! exhibits varying preferences across age groups: Gen Z and Gen Y prioritized ingredients, Gen X focused on a short five-minute cooking time, and baby boomers valued the cooking method, with a preference for the pan. Gut&Günstig customers consistently prioritized cooking method, with a strong preference for the pan, irrespective of age group.

### *Gender*

To summarize, both genders prioritized either cooking method or ingredients/ nutritional value across brands, emphasizing shared preferences among both groups. All gender-specific data can be found in Appendix 76. The examination of gender preferences in the frozen RTE meals industry revealed a consistent ranking across both males and females, with Frosta holding the top position, followed by Iglo, Gut&Günstig, and Ja! in descending order. However, gender differences introduced a notable level of volatility, particularly among females. While both genders displayed Frosta as their preferred choice, the magnitude of preference was more pronounced among females, with a positive utility score of 15, compared to males with a score of 11. Similarly, the negative utility score for Ja! was more substantial among females (-21) than males (-16), emphasizing a more significant gap in preferences among female consumers and thus displaying a stronger volatility. Attribute preferences were similar for the respective brands between genders, with both females and males prioritizing either cooking method or ingredients/nutritional value, depending on the brand. Analyzing *Frosta*, both genders exhibited a preference for cooking method, with similar levels of favoritism toward the oven and small positive utility levels for the pan. For *Iglo*, both genders shared a focus on ingredients/nutritional value, with an emphasis on the all-

natural/organic attribute. In the case of *Ja!*, both genders prioritized ingredients/nutritional value, particularly with an emphasis on the all-natural/organic level. *Gut&Günstig* customers, irrespective of gender, prioritized cooking method, with a preference for the pan. Notably, the oven also did not exhibit negative preferences.

### *Education*

Educational groups exhibited diverse brand and attribute preferences in the frozen RTE meals sector (see Appendix 77), with Frosta mostly favored. Overall, no universal preference was evident, and unique attribute preferences emerged within each group. An exploration of brand preferences within different educational groups in the frozen RTE meals industry revealed nuanced patterns. Frosta emerged as the preferred brand across all educational levels, except for the apprenticeship group, where Iglo took the lead. *Ja!* consistently ranked as the least favored brand across all educational categories, with the most significant volatility observed among individuals holding a high school educational level, showcasing a +16 preference for Frosta and a -29 preference for *Ja!*. In general, there was no overarching preference discernible across all educational groups, as each group exhibited distinct attribute preferences both within and across brands.

In the Frosta analysis, the GCSEs group prioritized price, with positive utility for 2.99€ and negative utilities for higher prices. Both high school and bachelor groups prioritized meal size, favoring couple servings, while apprenticeship and Master groups emphasized cooking method, preferring the oven and pan, respectively. For Iglo, educational groups focused on distinct attributes. The GCSEs group valued cooking time, with positive utility for five minutes. The high school group prioritized meal size, the apprenticeship group emphasized the cooking method (favoring the oven), the bachelor group valued meal type (preferring fitness and health meals), and the Master group prioritized ingredients/nutrition, favoring all-natural/organic options. *Ja!* exhibited varied preferences among educational groups. The GCSEs group emphasized price, with

Sara Christiansen

positive utility for 2.99€. Both high school and apprenticeship groups prioritized cooking method, favoring the pan for high school and the oven for apprenticeship, bachelor and Master holders prioritized ingredients/nutritional value, specifically favoring the all-natural/organic level. For Gut&Günstig, the GCSEs group valued meal size, especially couple servings. All other groups uniformly favored the cooking method, with a preference for the pan except for the apprenticeship group, which leans towards the oven.

### *Occupation*

Frosta was again the favored brand for most groups, with cooking method and ingredients/nutritional values consistently emerging as crucial attributes across all brands. All corresponding occupation data can be found in Appendix 78. Frosta emerged as the most popular brand among students, employed individuals, and those who prefer not to disclose their occupations. However, Iglo found favor with self-employed and retired individuals. The retired group displayed the highest volatility, with a notable positive brand utility for Frosta at +16 and a substantial negative utility for Ja! at -27. In general, across all brands, the most important attributes were consistent cooking method and ingredients/nutritional values, with some exceptions for each brand.

Analyzing Frosta, students, employed individuals, and retirees prioritized cooking method, with a preference for the pan. However, self-employed individuals valued meal size the most, exhibiting a strong preference for couple-sized servings. For Iglo, students emphasized meal type, particularly health/fitness meals. Employed individuals prioritized ingredients/nutritional value, with a preference for the all-natural/organic level. Both self-employed and retired individuals prioritized meal size, favoring couple-sized servings. Ja! demonstrated varied attribute preferences across occupational groups. For students and employed individuals, ingredients/nutritional value was crucial, with a preference for the all-natural/organic level. Self-employed individuals prioritized

Sara Christiansen

meal size, specifically opting for couple-sized servings. Retired individuals placed the highest importance on the cooking method, favoring the pan. Gut&Günstig showcased consistent attribute preferences across all occupational groups, with the cooking method being the chosen attribute. The pan was uniformly favored as the preferred method.

### *Living Arrangement*

Brand preferences in the frozen RTE meals industry consistently favored Frosta across different living arrangements, and regardless of living arrangement, either cooking method or ingredients/nutritional value was perceived as the most important attribute. Examining brand preferences based on living arrangements in the frozen RTE meals industry revealed consistent patterns across all four types of living situations (see Appendix 79). Frosta emerged as the favored brand for each group, followed by Iglo, Gut&Günstig, and Ja!, which consistently ranked as the least favorite brand within all living arrangements. Notably, living with a family showed the highest volatility, with Frosta having a positive utility of +22 and Ja! exhibiting a negative utility of -21.

In general, regardless of the living arrangement, either the cooking method or ingredients/nutritional value was perceived as the most decisive attribute across all four brands.

Analyzing Frosta, the cooking method proved to be the most important attribute across all four living situations, with the oven being the preferred choice. For Iglo, ingredients/nutritional value was consistently viewed as the most important attribute across all groups, with an emphasis on the all-natural/organic level. Ja! displayed varied attribute preferences based on living arrangements.

Individuals living in a single household and those living with a family prioritized cooking method as the deciding factor, with the pan winning for the single household and the oven for the family.

For groups living with flatmates or as a couple, ingredients/nutritional value was seen as most important, with a preference for the all-natural/organic emphasis. Gut&Günstig demonstrated

Sara Christiansen

uniform attribute preferences across all living arrangement groups, with the cooking method being deemed most important. The pan was consistently chosen as the preferred level across all groups.

### *Frozen RTE Meals Consumption*

Analyzing frozen meal consumption patterns revealed a varied landscape (see Appendix 80) with no clear preference toward a single brand across all groups. Frosta emerged as the most popular brand for individuals eating frozen RTE meals once a week, every two weeks, and every few months. In contrast, Iglo was favored by those consuming frozen meals two to four times per week, once a month, and almost never. The highest volatility in choices is observed among the groups eating frozen meals once a week (20 vs. -22) and every two weeks (19 vs. -25).

In general, with some exceptions, cooking method and ingredients/nutritional value were consistently deemed the most important attributes across all frequencies of meal consumption.

For Frosta, individuals eating frozen meals at least once a week prioritized the cooking method, with the oven being the most popular choice. Those consuming meals every two weeks valued meal size most, favoring couple servings. Iglo showcased a consistent emphasis on ingredients/nutritional value across all consumption frequency groups, with the level of all-natural/organic emphasis being the most popular, except for those who barely consume frozen meals, where locally sourced/sustainable attributes are prioritized. Ja! revealed that individuals consuming frozen meals two to four times per week, every two weeks, once a month, and every few months saw ingredients/nutritional value as the most important attribute, favoring all-natural/organic products. The individuals eating frozen meals once a week or almost never prioritized cooking method, with the oven slightly winning over the pan in these groups. For Gut&Günstig, the cooking method was consistently chosen as the most important attribute across all consumption frequency groups, with both the pan and oven being favored levels.

### 5.2.3 Pivot Tables

#### *Age x Frequency*

For the Gen Y and baby boomers, above 60% would consume frozen RTE meals at least twice a month while Gen Z in comparison consumes them less regularly. For Gen X participants, almost 50% consume frozen meals twice a month or more (see Appendix 81). The differing consumption patterns of frozen RTE meals among various age groups can be attributed to a combination of lifestyle, priorities, and convenience factors. In the older age groups, individuals might have busier schedules or face time constraints, leading them to opt for quick and convenient meal options. Especially what was gathered from the >59 generation, people mentioned the convenience of frozen RTE meals as they do not have the same physical ability of access to all cooking methods or eating out might not be as easy. According to van der Horst et al. (2010) older generations also hold a higher opinion of frozen RTE meals and about their nutritional values. In terms of the ANOVA analysis (see Appendix 82), the difference was not confirmed to be significant with  $F(3,121) = 1.92, p = .129$ .

#### *Gender x Frequency*

In a recent survey, it was found that 54% of males, specifically 31 out of 57 respondents, regularly consume frozen RTE meals, indulging in these options at least twice per month. In comparison, 41% of females, with 28 out of 68 participants, exhibit a similar pattern of regular consumption, suggesting a notable gender-based difference in the preference for frozen meals (see Appendix 83). Considering the two-factor gender demographic settings, a t-test was conducted (see Appendix 84), but the difference between males ( $M = 3.77, SD = 1.70$ ) and females ( $M = 3.88, SD = 1.34$ ) was not significant:  $t(103.74) = 0.79, p = 0.429$ . here the difference between the two groups was not significant. The two-tailed test is at 0.42 and 0.43.

#### *Education x Frequency*

In examining the dietary habits of individuals with varying educational backgrounds, intriguing patterns emerged (see Appendix 85). Among those with Abitur education, 36.36% (4 out of 11) consumed frozen RTE meals at least twice a month. Comparatively, individuals with an apprenticeship exhibited a higher rate, with 80% (8 out of 10) embracing such meals regularly. Those with GCSE education followed suit, with 50% (2 out of 4) indicating regular consumption. The trend continued among those with bachelor education, where 64.29% (27 out of 42) indulged in frozen meals on a regular basis. Interestingly, Master students, constituting 47.37% (27 out of 57), also demonstrated a significant inclination towards regular consumption. Notably, these findings underscored that individuals with an apprenticeship background emerged as the highest consumers, reflecting 80% regularity in the consumption of frozen RTE meals. These results hint at a potential correlation between educational background and dietary choices, where those with practical training, such as an apprenticeship, might favor the convenience and efficiency offered by frozen meals in their busy lifestyles. One person preferred not to disclose their educational status and consumed frozen meals two to four times per week. However, no significant difference could be found in the analysis of variance  $F(4,119) = 2.13, p = 0.081$ .

#### *Occupation x Frequency*

Exploring dietary habits based on occupational status revealed intriguing trends (see Appendix 86). Among employed individuals, 50% (23 out of 46) consumed frozen RTE meals regularly, at least twice a month. In contrast, retired individuals exhibited a notably higher rate, with 85.71% (6 out of 7) indulging in such meals regularly. Self-employed individuals followed suit, with 57.14% (4 out of 7) embracing regular consumption. Surprisingly, students, constituting 41.67% (25 out of 60), displayed a lower frequency of regular consumption compared to the retired demographic. It is noteworthy that five respondents who preferred not to disclose their occupation also reported infrequent consumption of frozen meals. These findings hint at a distinctive pattern where retired

individuals, despite their age group, consume frozen meals more regularly than students. Meanwhile, the working force, both employed and self-employed, leaned towards a higher frequency of regular consumption, possibly indicative of time constraints and the appeal of convenient meal options in busy professional lives. To confirm the significance of the results, an ANOVA was conducted. The initial analysis was able to detect a significant difference between the group “prefer not to say”.

#### *Living Arrangements x Frequency*

Examining the consumption patterns of frozen RTE meals based on living arrangements unveils intriguing insights (see Appendix 87). Among individuals cohabiting with flatmates, 40% (20 out of 50) partake in these meals regularly, at least twice a month. In contrast, those living with family members exhibit a lower rate, with 35.71% (5 out of 14) engaging in regular consumption. Interestingly, individuals cohabiting with a partner and those residing in single households share a similar pattern, both at 60.71% (17 out of 28), indicating a higher frequency of consuming frozen meals regularly. These findings suggest that living with a partner or in a single household may contribute to a higher inclination toward the convenience of frozen RTE meals, possibly influenced by factors such as shared meal responsibilities or individual lifestyle choices. In contrast, living with family members may involve more diverse meal preparations, potentially impacting the regularity of frozen meal consumption. A statistical significance eroded between the difference in frequency for people living alone and people living with a family  $F(3,120) = 3.15$ ,  $p = 0.028$ . The Tukey Test indicated that single households eat significantly more frozen meals than people living with a family.

#### 5.2.4 Conjoint Simulation

CA provides a valuable tool for simulating preferences in the frozen RTE meals market, offering insights into both brand and price dynamics. This simulation explored various scenarios to

understand the impact of brand removal and price adjustments on market shares and revenues. In the baseline scenario (see Appendix 88), favorable levels were uniformly chosen across brands for ease of comparison. Every brand offered frozen RTE meals with a cooking time of five minutes, oven preparation, health and fitness meal type, all-natural organic ingredients, priced at 2.99€, and served as a couple portion. According to the survey, Frosta emerged as the market leader with a 41.1% share, followed by Iglo (29.8%), Gut&Günstig (16.5%), Ja! (6.6%), and others (6%).

### *Brand Importance*

The assessment of brand importance (see Appendix 89) involved removing one brand at a time from the market, revealing noteworthy shifts in market share. Removing Frosta resulted in Iglo gaining almost 60% more market share (from 29.8% to 52.1%), positioning it as the sole leader. However, Gut&Günstig emerged as the most significant beneficiary, more than doubling its market share from 6.6% to 14.1%. Conversely, removing Iglo sees Frosta and Ja! securing the major shares, with Gut&Günstig nearly doubling its market share. Removing Ja! benefited Iglo proportionally, with most of the remaining market share distributed to Frosta products. Overall, the market experienced the most significant contraction in revenue when Frosta was removed, emphasizing Frosta's pivotal role in the frozen RTE meals market.

### *Price Importance*

The exploration of price importance involved increasing prices for each brand's meals per serving. For Frosta (see Appendix 90), an increase from 2.99€ to 4.99€ resulted in a 25% reduction in market share but a substantial revenue increase of almost €400k, showcasing a price elasticity of -0.5. For Iglo (see Appendix 91), a price increase from 2.99€ to 4.99€ led to a nearly two-thirds reduction in market share, underscoring Iglo's higher sensitivity to price changes (-1.6). Interestingly, increasing Ja!'s prices to 4.99€ halved its market share, with a revenue decline of 80k€ and a price elasticity of -1.4 (see Appendix 92), underscoring Ja!'s price-sensitive demand.

Sara Christiansen

The repercussions of raising Gut&Günstig's prices resulted in a one-third loss of market share, indicating that Gut&Günstig is not as price-sensitive, with a price elasticity of -0.5 (see Appendix 93).

#### 5.2.5 Segmentation (Personas)

The development of personas based on literature and expert interviews has enriched the understanding of consumer preferences, leading to the creation of four distinct personas: Ben, Karo, Helen, and Hermann. These personas have been integrated into the CA establishing specific segments tailored to each persona, as outlined in the corresponding table (see Appendix 94). The user profiles have been refined to align with the demographic groups outlined in Conjoint.ly. This adjustment is rooted in the additional questions found in Appendix 60. In order to maintain group sizes that are sufficiently substantial for reliable insights, all frequency levels for the consumption of RTE frozen meals were included.

Examining brand preferences (see Appendix 95), it was evident that Ben predominantly favored Iglo, Karo strongly preferred Frosta, Helen exhibited a robust preference for Frosta, and Hermann led toward Frosta with Iglo as a close second. Attribute importance analysis (see Appendix 96) revealed that on average across brands, Ben, Karo, and Hermann prioritized the cooking method, particularly favoring the oven. In contrast, Helen placed greater emphasis on the meal type. Analyzing attribute levels (see Appendix 97), it was apparent that short cooking times, lower prices, the oven as a cooking method, and all-natural/organic products yield positive utilities across all personas. Conversely, the microwave was universally unpopular, as is a price of 4.99€ and extended cooking times, all resulting in negative utilities across the personas. This comprehensive analysis provides valuable insights into the nuanced preferences of each persona within the frozen RTE meals market.

## **7. Conclusion**

### **7.1 Discussion**

#### Brand Discussion

The first topic that carries through past literature, as well as qualitative and quantitative research, is the importance of *brands*. While interviewed experts Hieke and Mindermann deem the brand to have a limited influence on consumers in the RTE meals market their statement contradicts several consumer psychology models such as the CDM or the BPM. Those theories include brand as a noteworthy component of the resulting consumer behavior, although it should be noted that these theoretical models have not been directly applied to the frozen RTE meals market. Furthermore, the experts statement also contradicts findings in the PM and the CA of this research: The PM showed that brands that currently perform best in the market also tend to have more favorable perceptions associated with their products. The CA confirms that the brand is an important factor in consumer choice and both surveys indicate that certain associations and attributes can be tied to a brand. A possible reason for this contradiction could be either the different views of experts and consumers in the decision-making process or temporary changes in consumer behavior that have impacted the expert's judgement. As Frosta pays attention to sustainability and follows modern food trends, the brand has gained a competitive edge in the industry, which is confirmed in the PM, the qualitative research, and the CA. Iglo shares the positive perception regarding product quality and uses their traditional brand image as a point of differentiation. Notably, the private labels perform worse in terms of perceived product quality. This finding can be explained through the halo effect, where a favorable brand reputation can subsequently improve product perception as well, explaining the similar profiles of independent and private labels in the PM. Furthermore, when putting the market dynamics into perspective of this research, the scope of possibilities and objectives of each brand should be considered as well. As independent brands, Frosta and Iglo

## Group Part

focus exclusively on their frozen products, while their fellow competitors Ja! and Gut&Günstig offer products in various categories of food and household items. Thus, associations with these private labels tend to be less focused on specific categories but on more generic product attributes, often leading to being perceived as less competent in a single category. Therefore, the results of this thesis indicate that brand is an important factor in the decision-making process of German consumers for frozen RTE meals.

### Attribute and Level Discussion

The literature stated that people are negotiating values, stating that individuals must choose between conflicting values (Connors et al. 2001; Sobal and Bisogni 2009). This is also evident when comparing the various attributes and levels of relevant facets and preferences among the different interviews and surveys. Consumers have different strategies, besides brand preference, to choose products in store. Contrary to the expectations, the CA found that attributes like cooking method, meal size, and ingredients/nutritional value were important for people overall and within different demographic groups. Traditional factors like meal type, cooking time, and price were given less priority. This result challenges parts of the qualitative research which identified taste, convenience, and price as critical factors. This aligns with the functional and emotional values that emerged as relevant facets, which emphasize factors such as convenience, taste, and nutritional content. Taste and convenience thereby align with the CA and are therefore important decisive factors. However, the importance of price varies across the findings. According to the literature review, prices have been increasing recently and differentiating price points can be a decisive factor (Statista Market Insights 2023b). This unexpected CA outcome could be attributed to the contextual nature of decision-making. The attribute of price appears more significant in the physical shop when spending money, yet when theoretically contemplating important attributes in a CA survey, other factors such as cooking method and ingredients take precedence. The survey's close price

## Group Part

choices (2.99€, 3.99€, and 4.99€) may have contributed to this pattern, making individual price differences less obvious and thereby less of a decisive factor. Thus, the survey results suggest that, while price may influence in-store decisions, other attributes like cooking method and ingredients take precedence in the theoretical evaluation of consumer preferences. Frozen RTE meals are chosen due to their ease of preparation to ensure quick and satisfying meals, which especially underscored the functional values (Sheth, Newman, and Gross 1991) but is also evident in the data gathered in the CA. In addition, the literature revealed that purchasing decisions are significantly influenced by the in-store shopping experience, in particular the design of the frozen food shelf, the visibility of the brand, in-store promotions, and the visual appeal of the packaging. These influencing factors were also observed in the expert and consumer interviews, as well as the self-report in the first survey and can additionally influence the consumer at the point of sale. This could be another explanation for the discrepancy between the quantitative and qualitative research. It is therefore concluded that price is a key element in German consumers' perception and preference for frozen RTE meals.

Furthermore, the analysis led to the deduction that a low price is associated with low quality in the minds of customers. As indicated by industry experts, for today's broad target group quality is not a deciding factor. While quality may not be of primary importance to the current broad consumer base, neglecting its importance completely ignores the potential for market expansion by attracting new consumers who value qualitative ingredients. Disregarding product quality could prove harmful when it comes to appealing to a diverse audience. This underlines the need for a differentiated product range that caters to different consumer requirements.

The recognition of plant-based diets as a niche trend by industry experts is a complex issue. On one side, the CA indicated that consumers are not prioritizing these options when choosing frozen RTE meals, even though experts deemed this trend to be disruptive and long-lasting. On the other

## Group Part

side, vegetarian/vegan meals were more popular with the cheaper brands Ja! and Gut&Günstig, which may be due to concerns about the meat quality in the products of these brands. This could confirm that vegetarian and vegan meals gain popularity among meat eaters as well, which would then in turn confirm the experts' findings. This complex dynamic underscores the importance of aligning market strategies with actual consumer behaviors and to challenge preconceived notions about the universal appeal of certain product categories.

According to experts, there is also a niche preference for healthier meals. However, a widespread skepticism in the literature on the healthiness of frozen RTE meals was apparent. The general misconception of labeling all frozen RTE meals as unhealthy has led many people to refrain from buying frozen meals, a trend that was confirmed during the interviews conducted for the supplementary part of the study. These findings are in line with the results of the CA, which consistently highlights health-orientated or fitness meals as the most popular. As suggested by experts, there is a significant and still unused opportunity in the market to offer truly healthy RTE meals and to improve communication about the health benefits of these healthy RTE meals. In addition, the decreasing interest in light meals observed in the CA and in the interviews emphasizes the dynamic nature of what is perceived as healthy. Companies need to observe trends and changes in the market more regular and adapt where necessary.

Based on the literature review, consumers exhibited a clear preference for locally sourced and sustainable options, as evidenced by the discernible inclination towards more environmentally friendly and health-conscious products. This trend is particularly noticeable in the CA, reflecting the preferences of Frosta and Ja! customers, who leaned towards sustainability and health consciousness, and Iglo and Gut&Günstig customers, who showed a distinct preference for all-natural and organic products. Industry expert Campuzano also emphasized the diverse expectations of consumers who want ethically produced, ecologically sustainable, organic, and healthy products,

## Group Part

but at a relatively low price, which is sometimes not acceptable to offer by the industry. Thus, in theory, consumers want sustainable and high-quality products, although in practice those are often disregarded due to their high price points. Furthermore, according to expert Hieke, demand for sustainability has declined due to recent economic events such as COVID-19 and inflation, as consumers have become more price-sensitive, making them perceive sustainable products as too expensive, resulting in increased price sensitivity and shifted preferences to simplicity and speed. Additionally, the interviews revealed that only Gen X consumers displayed a strong commitment to sustainability and made an effort to choose seasonal and regional products. This leads to the conclusion that, while sustainability may be important to consumers, the current economic situation compels the majority to prioritize other factors, influencing the final purchase decision at a greater extent. Lastly, the literature and qualitative research suggested that recommendations from friends, family, experts, or online reviews exert a significant influence on consumer attitudes (Thies, Wessel, and Benlian 2016). Therefore, positive word-of-mouth through influencers, nutritionists, and user of frozen RTE meals could have a positive impact on consumer acceptance and become an important element driving German consumers' choices in frozen RTE meals. However, the substantial influence of word-of-mouth recommendations could also lead to an increase in negative word-of-mouth, as non-users generally have bad perceptions of the products and brands and may be difficult to convince. Thus, the perception of frozen RTE meals could be very susceptible to the personal opinions of the public, with non-users having the potential to exert an opposite effect and prevent potential users to try frozen RTE meals. Nevertheless, social media offers an enormous reach, meaning that its use poses a great opportunity for the industry to improve the general perception of frozen RTE meals.

## Demographic Diversity Discussion

## Group Part

The result of this research indicates a clear preference of baby boomers towards Frosta. Older generations significantly value quality over price (Fingerman et al. 2012) and want a nutritious, qualitative meal. Surprisingly, however, baby boomers in the PM showed a high perception of Gut&Günstig. This contradicts the literature and cannot be confirmed by the CA, as both private labels have a negative utility value in all demographic groups. Consequently, baby boomers mostly opt for high-quality RTE brand meals, but also occasionally go for private labels probably due to rising prices and the improving reputation of private labels. In contrast to the baby boomers, Gen Z is, according to the literature, more critical and pays attention to value for money (Goldring and Azab 2012) preferring convenient and quick meals. It was therefore not surprising that the PM found that younger generations perceive private labels better than older generations.

Based on the CA, the most frequent buyers of frozen RTE meals are Gen Y and baby boomers, with a higher level of regular consumption compared to students (Gen Z). This is partly consistent with the literature, which showed that Gen Y increasingly prefers frozen RTE meals due to their convenience and fit with their lifestyle. Surprisingly, the baby boomers, who were ranked second in CA, are clearly in last place in the literature. Yet, according to CA retired individuals value frozen RTE meals due to their convenience, possibly due to factors such as simplified meal routines or ease of preparation. This contradiction could be explained by the different samples. The CA of this thesis worked with a sample of 125 individuals which is significantly smaller in comparison to the Statista survey with over 2,000 respondents, resulting in potential differences. Another explanation could be that the preferences of the generations have changed over the period of the Statista data collection (2017) and the data collection of this work (2023).

According to the CA, students exhibit the least frequent consumption of frozen RTE meals, while individuals with work experience or self-employment demonstrate higher frequencies. This pattern is consistent with the Statista 2023 report, which reveals that 62% of consumers fall into the

## Group Part

medium to high-income bracket. Conversely, the low-income bracket, encompassing students, constitutes only 38% of consumers.

The literature showed an even gender distribution with 50% male consumers (see Appendix 11), which can be confirmed with CA and PM results. Males consumed significantly more frozen RTE meals and perceived Iglo's products as tastier. Moreover, throughout the CA the difference in utility for each brand varies less for males than it does for females. The observed pattern may suggest that current products of the frozen RTE meals market may cater more towards male preferences or tastes. These discrepancies could also be due to differences in the consumer decision-making process, caused by gender, as the CA shows that females are influenced more heavily by the brand during the purchasing stage.

Lastly, *living arrangements* yielded similar results across the different surveys and the literature review. The literature showed increasingly more people living in single households (Gançalves et al. 2023) and the PM demonstrated that people who live in a single household or with a partner have a better perception of Iglo products, suggesting that the brand is well positioned for the future. This can also be confirmed through the CA where a single household's preference for Frosta and Iglo are very close together.

In essence, these similarities as well as surprises among the various data results underscored the dynamic nature of consumer preferences, emphasizing the need for a more granular understanding of the intricacies within the frozen RTE meal market. The discrepancies between expert and consumer opinions, literature expectations, and survey outcomes illuminate the complexity of consumer decision-making, urging industry stakeholders to recalibrate strategies based on real-world behaviors rather than generalized assumptions.

## Overall Conclusion

## Group Part

The overall aim of the study is to answer the research question: What key elements drive German consumers' choices in frozen RTE meals, and how can insights into these factors be utilized to formulate a successful product strategy? Both the qualitative and the quantitative analysis detected that consumer's choices and perceptions are influenced by social and demographic factors, especially factors related to age and living arrangements. In general, the brand Frosta established itself as the brand catering to most consumer preferences. Moreover, it became evident that the brand image is an important factor in the decision-making process of German consumers for frozen RTE meals. Furthermore, discrepancies between previous literature, qualitative research, and quantitative research show the high volatility of this market toward societal changes. Emotional value as well as functional value (practical attributes) are key elements that drive consumer behavior. Whereas many studies focus on functional attributes, the emotional value should not be underestimated. Taste, convenience, and price serve as additional decisive factors, alongside the acknowledged niche preference for healthier, high-quality, or vegan/vegetarian options. Moreover, while no factor is a sole determinant, consumer preferences also strongly depend on their demographic and socioeconomic background and can be positively as well as negatively influenced by word-of-mouth. This research has discovered a strong influence of social changes impacting consumer perception and a shift in prioritization of attributes, which shows the potential of gaining new insights on undiscovered market and research opportunities. The product development has given an indication of the opportunities that this market offers. With constantly changing societal norms that influence consumer behavior and attitudes toward food, brands will have a major challenge keeping up with the trends and unfolding their full potential.

## **7.2 Managerial Implications**

From a practical perspective, the analysis provided significant results for guiding strategic decisions across the competitive marketplace. The strategic implications of the thesis are based on the classic four Ps framework of the marketing mix - product, price, promotion, and place (the focus here is more on distribution). This provides a comprehensive approach to navigating the competitive frozen RTE meals market, taking into account everything from product innovation and pricing strategies to promotional tactics and distribution channels.

First, the PM and CA allowed for a much more detailed product positioning strategy, showing gaps and opportunities in the market that also align with consumer preferences. To be successful in the market, brands need to ensure that they have a strong strategic positioning relative to their competitors and understand the strengths and weaknesses of their own position in the market. The research revealed that there is a clear distinction in perception between private labels owned by supermarket chains and independent brands that focus solely on frozen products. When looking at the opportunities and challenges in the market it is important to carefully consider brand as a factor, when developing new products. Depending on the goals and objectives of the product launch, it should be ensured that the new product is congruent with the values of each brand, so the product will feel authentic in connection with the brand. In the competitive frozen RTE meals market, differentiation is key, and each brand should leverage its unique selling proposition while maintaining its core values and strategic direction. Iglo, with its sophisticated and traditional appeal, should continue to emphasize its industry experience and commitment to quality ingredients and nutritional value. Further, a collaboration between high-end chefs or restaurants could be an opportunity for Iglo to salvage its perception as a high-end brand and gain a larger customer base. Ja! and Gut&Günstig could differentiate themselves through more generous portions and taste, or superior brand perception with improved dishes and recipes. If private labels

## Group Part

improve their brand perception in relation to product quality, they have the chance to gain customer loyalty across other product ranges as well, making use of cross-selling opportunities. For example, Gut&Günstig could collaborate with influencers to improve the perception of product quality brands, as they already target younger generations. Collaborations with influencers could also further expand Frosta's reach into a younger audience. In addition, the current market leader Frosta could further capitalize on its modern, diverse, and innovative image by continuing to offer fresh and natural options and emphasizing cooking methods and portion sizes that appeal to health-conscious consumers.

All brands should stay true to their essence but be adaptable and recognize the need for strategic compromises to meet different market demands without compromising their established positions and values too much. This implies that brands should also be willing to take trade-offs into account, as it is impossible to cater to all niches in the market at the same time. This personalized lens provides actionable insights for businesses, allowing them to tailor offerings and strategies to meet the diverse preferences within the frozen RTE meals market.

In terms of promotional strategies, brands can use influencer collaborations for promotions and discounts to increase affordability and capitalize on the flexible brand preferences of younger generations and regular consumers of frozen RTE meals. Both the CA and the analysis of variance in the PM showed that younger generations have less extreme brand preferences. This also applies to people who regularly consume frozen RTE meals two to four times per week and switch brands to vary their diet. As these consumers tend to switch brands for variety, such targeted promotions can effectively attract and retain their attention in a competitive market. Moreover, the findings of this research indicate how brands can enhance customer experience by examining which aspects of the customer journey are vital for a positive experience.

## Group Part

Service and decision support were found to be often neglected by most brands. Younger generations in particular were increasingly concerned about the poor nutritional communication of frozen RTE meals. However, the information provided in advertising rarely has an active influence, therefore the implementation of new strategies, such as an educational campaign, could meet the needs of consumers. Another way of changing consumer perceptions and disseminating information could be to make more effective use of mass media advertising. Especially food related content such as morning TV shows (German “Frühstückfernsehen”) or other cooking shows, could offer the right platform to inform consumers adequately about the benefits of healthy frozen RTE meals, but also about the products themselves.

To influence consumer perception of frozen RTE meals, long-term strategic engagement with nutritionists and influencers is critical and recommended. Working with nutritionists adds authority and legitimacy to nutrition claims. Exclusive discounts and limited-time promotions, combined with in-store product sampling, create a sense of urgency that encourages interaction and quick purchases. The campaign expands its audience through social media integration in the form of collaborations with health and fitness influencers, customer feedback, and live streaming to highlight positive experiences, as well as advertising.

In the food industry, it has been observed that customers are often influenced in their purchasing decisions by direct taste experiences. Special attention should therefore be paid to in-store promotions. Similar to eye-catching advertising, this can include tasting stands, where a company representative is on hand to offer customers food to try. If the stand is located close to the freezer cabinets, a positive taste experience can encourage customers to buy spontaneously and at the same time convince them of the taste of the products. In addition, such face-to-face interactions provide an ideal opportunity to clear up any uncertainties about nutritional values, thereby building confidence in the product.

## Group Part

Furthermore, the findings of this research can be used to understand how different price points influence consumers. The competitive landscape is led by brands that charge higher prices. Especially for ingredients like meat or fish, higher prices are often associated with qualitatively high products. Brands also make use of frequent discount models, keeping the unique value proposition high to indicate higher quality but selling for lower price points.

Moreover, meal sizes, cooking method, and nutritional value/ ingredients have shown to be important attributes that enhance product experience. It is crucial to understand each generation's preferences and tailor the variety of meals to their needs (as proposed in 6.1). Regarding packaging, there is a lack of personalization that needs to be addressed. It is crucial to create visually appealing and simple packaging that is suitable for consumers with limited space. The packaging should be redesigned to highlight freshness and clear nutritional information, ideally in a sustainable format. Through surveys and social media interactions, customers can be engaged, giving a platform to answer complaints and improve the campaign and the products in real-time based on input.

According to interviews with younger generations, packaging that can be heated up would be ideal. On this basis, it is important to meet students' need for convenience by producing microwaveable cartons so that frozen RTE meals can be easily heated in the microwave on campus and eaten straight from the tray. This packaging option is also ideal for young professionals for whom saving time during their lunch break is crucial.

Lastly, the distribution channel is an important part of the customer journey. Enabling further access to a wider variety of products and also enabling subscription services that allow for home-delivery will improve the experience of older consumers. Establishing partnerships with supermarkets is essential to the subscription service's success. Supermarkets have to be registered in the app so consumers can subscribe to the service. Through the app customers can order and

## Group Part

track their purchases. To increase awareness of this service it's crucial to have marketing campaigns.

Furthermore, the brands must think about how to implement the changes in the long-term and how to form strategic partnerships with supermarkets and influential individuals. The research has shown the volatility of consumer preferences and food choices to societal changes and trends. In order to sustain long-term success, brands should be able to both fulfill the need for trendy food options as well as offer a staple of traditional meals. Brands have to make sure that they implement mechanisms to monitor dynamic shifts in the market and maintain a sense of flexibility to allow for adaptations.

### **7.3 Limitations and Implications for Future Research**

While this study provides valuable insights into the consumer perception and preferences of frozen RTE meals, it is crucial to acknowledge the limitations that may impact the generalizability and applicability of these findings and in conclusion, propose how future research could explore gaps that were not covered by this research.

First of all, the focus of this study was to primarily elaborate on existing models of consumer behavior like the FCPM, despite the existence of various other models that could provide additional insights into food selection behaviors. This model in particular attempts to cover a broad range of factors and does not go in depth when examining specific elements that influence food choice. Complex dynamics in the living arrangements of families and cultural dynamics of non-post-industrial Western societies of the early 21<sup>st</sup> century are not thoroughly considered. While the cultural scope of this study is congruent with the scope of the model, applicability and relevance in other cultural settings and non-western societies might not be given. Future research should take cultural differences into account that influence the eating habits and preferences of the sample.

## Group Part

Further, it is difficult to capture the full spectrum of ever-changing market dynamics and the latest trends, thus in perspective of the quickly changing societal norms that influence eating habits and consumer behavior, the applicability of models developed in the past 20 years should be tested more thoroughly and adapted to modern societal standards.

RTE market trends are fast-moving and driven by constant technological innovations that affect production, preservation, and distribution. This rapid development can lead to relevant innovations and findings being missed if they are not captured within the timeframe of the included studies. Therefore, to keep this study relevant, new studies and surveys will have to be consulted to include the changing environment and account for any evolvments in the frozen RTE meals industry. The thesis did not extend its analysis to other distribution channels to keep some constants in the analysis. However, this will change over time as it is an area that is poised to gain even greater importance as online food shopping grows more prevalent. Furthermore, economic factors, such as changes in consumer purchasing power or supply chain disruptions, are also critical and have not been considered. They are complex and not well understood, mainly due to missing research dealing specifically with the German market for frozen RTE meals. This scarcity also made it necessary to rely on broader, more general studies for this research which may not provide the precision that more focused research would offer. Future research could focus on comparing different sales channels, which would also introduce other successful brands of frozen RTE meals such as Bofrost or LiveFresh. A comparison that includes different sale channels could give a more dynamic overview of the current frozen RTE market and also gain a more in-depth and exhaustive picture of the industry.

The interpretation of the interviews is inherently influenced by the subjective viewpoint of the researchers, introducing the possibility of personal biases impacting the analysis. The limited number of interviews, with only five experts from industry and academia, suggests that further

## Group Part

interviews could enhance the robustness of the results. Adding the perspectives of experts from more private labels and the independent brand Iglo could also improve and refine the results. Additionally, the small sample size of two users and one non-user gaining insights into the target group and validating the personas limits the generalizability to the broader population, as the selection of interviewees focused on consumption behavior. The same limitations apply to the confirmative interviews that were conducted in the last part of this research to test ideas for future product development. Differences in demographics were only partly considered, thus, to represent more diverse demographics a bigger sample would provide a more accurate depiction. The accuracy of this study is generally limited by practical constraints such as time and space, which limits the scope of the research. Both the literature review and the qualitative analysis hinted at the big shifts in eating habits and emerging trends such as sustainability in food consumption. While the CA was able to slightly pick up on the topic of meal type, more research should be constructed in terms of offering even more options. Moreover, sustainability is a concept that is a very faceted and multidimensional concept that needs to be examined on its own. People's associations with the meaning of sustainability in foods can vary greatly, going from the packaging to the way of sourcing to the type of meal. Thus, understanding customers raising demands for more organic and natural foods, sustainability is also a trend that is further emerging in the food industry and needs to be examined in detail.

While the construction of the multidimensional PM offers a nuanced understanding of consumer perceptions, it is essential to acknowledge the limitations of this technique. The high correlation of perceived attributes only allowed for a narrow and limited view of general perception, possibly missing other important factors that influence the perception of RTE brands. Furthermore, as already pointed out in the analysis, no demographic group has significantly different perceptions of an attribute that is related to all four brands. The few significant results could be explained by a

## Group Part

possible confounding variable like individual taste preferences or dietary habits that were not considered in the study. Furthermore, ANOVA also has limitations as a statistical tool, as the method assumes that the means of the groups being compared are the only relevant sources of variation. If interactions between demographic variables exist or if the influence of a particular factor is contingent on another, one-way ANOVA may not be the most suitable analytical approach. Future research may benefit from a more extensive exploration of potential confounders and the incorporation of control measures to enhance the precision of the analyses, as well as implicating more advanced statistical analyses like regression analysis with interaction terms to unveil more intricate relationships.

Lastly, both surveys have several limitations caused by possible individual differences. First of all, while both sample sizes, 157 and 125 were able to conduct statistically significant results, larger samples would provide a more generalizable and robust representation of results. Furthermore, there is a potential bias introduced by the sampling technique. Convenience sampling can introduce a higher level of homogeneity in a sample with respondents being more likely to have similar demographic backgrounds making the sample less representative of the general population. Certain demographic groups, such as older individuals, professionals, or those from diverse backgrounds, are underrepresented in both samples. In such cases, expanding the participant pool to include a more diverse range of individuals with varied backgrounds, lifestyles, and preferences could enhance the generalizability of the findings. Additionally, reassessing and broadening the scope of demographic variables, including psychographic variables or cultural influences, may uncover previously overlooked associations. Another significant limitation arises from the diverse ways participants accessed and responded to the survey. Especially as the CA was mainly constructed to be answered on a computer, the high rate of respondents using mobile phones could have caused difficulties in survey comprehension and response consistency due to the different interface layouts

## Group Part

(see Appendix 100). Nevertheless, it was decided that in favor of higher response rates, this limitation was considered willingly. However, for future research, it would be advised to limit the CA completion to the desktop format.

Lastly, the qualitative findings of the last interviews are currently not applicable to a large scale of consumers. Only a total of 16 interviews were conducted, thus, to ensure viability of the product development in the market, a substantial quantitative analysis should be conducted to confirm the findings.

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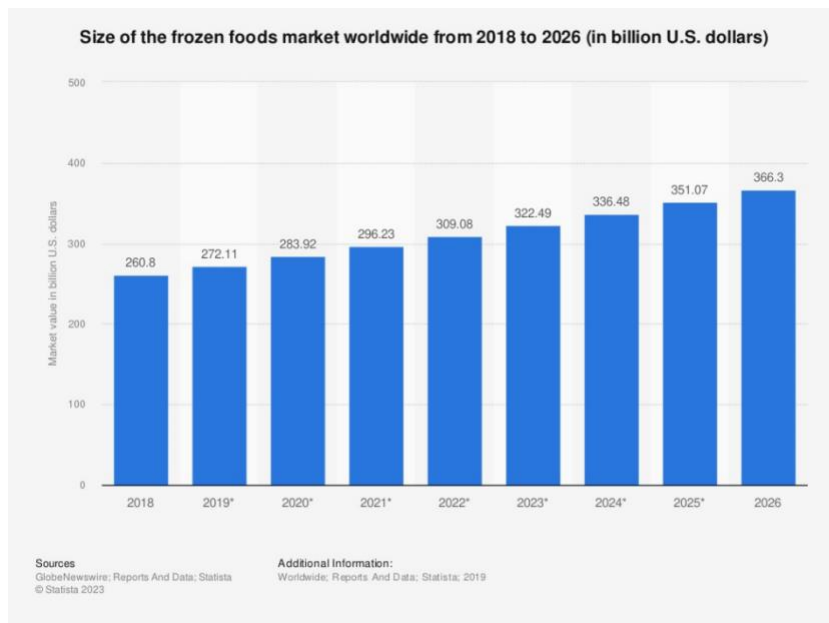
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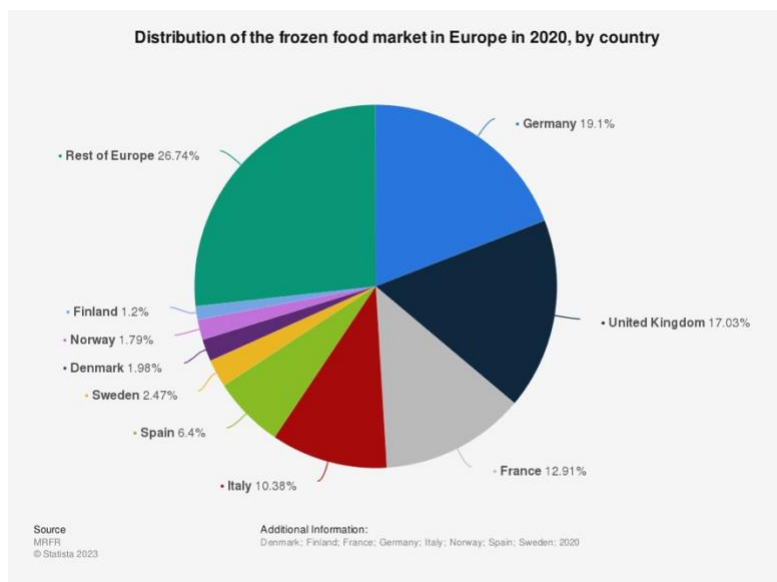
## Appendices

### Appendix 1 – Size of the Frozen Food Market Worldwide from 2018 to 2026



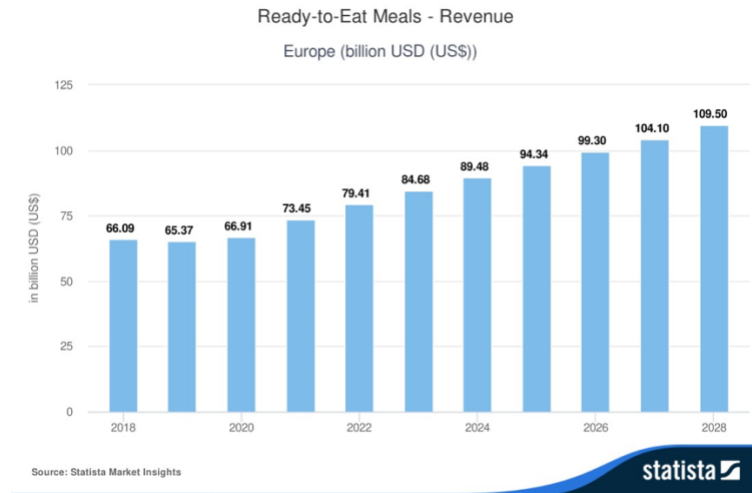
Source: Statista 2020

### Appendix 2 – Distribution of the Frozen Food Market in Europe by Country (2020)



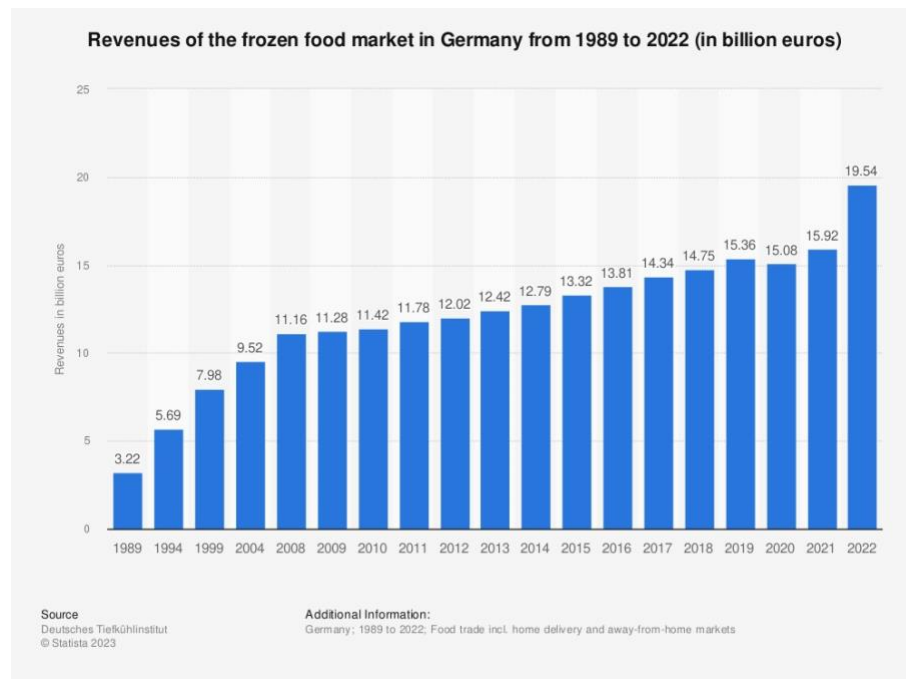
Source: MRFR 2020

### Appendix 3 – Ready-to-Eat Meals Revenue



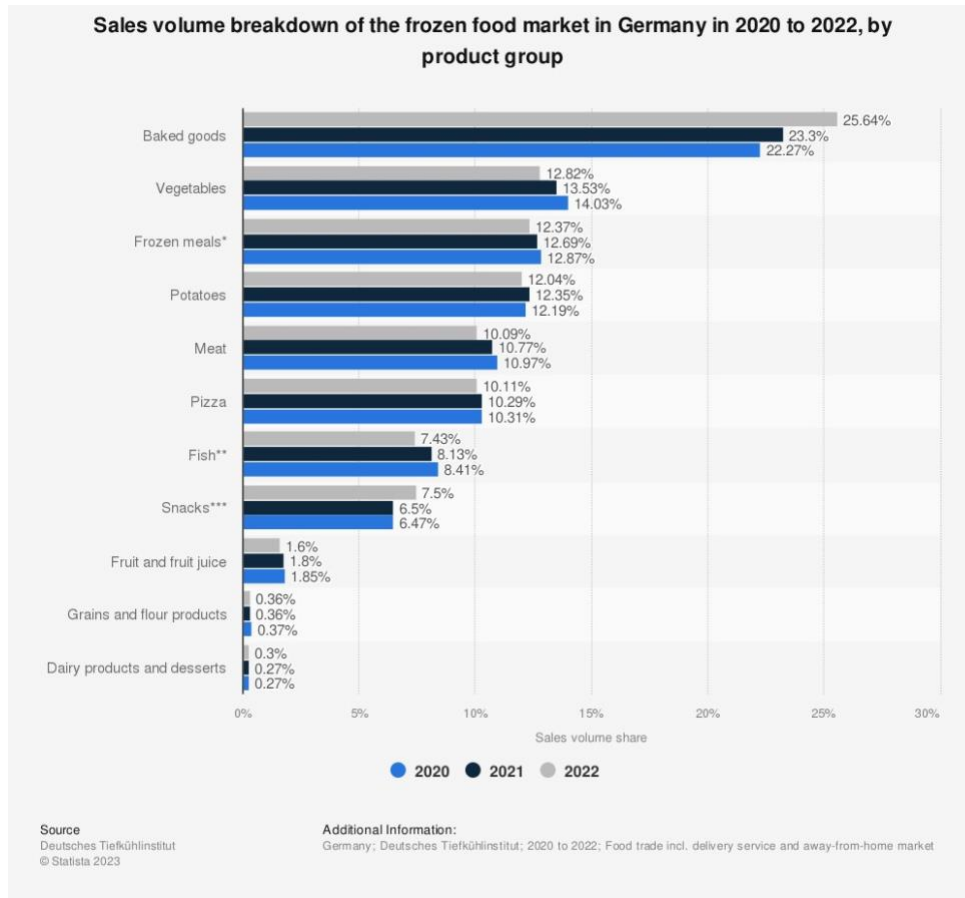
Source: Statista Market Insights 2023d

### Appendix 4 – Revenues of the Frozen Food Market in Germany from 1989 to 2022



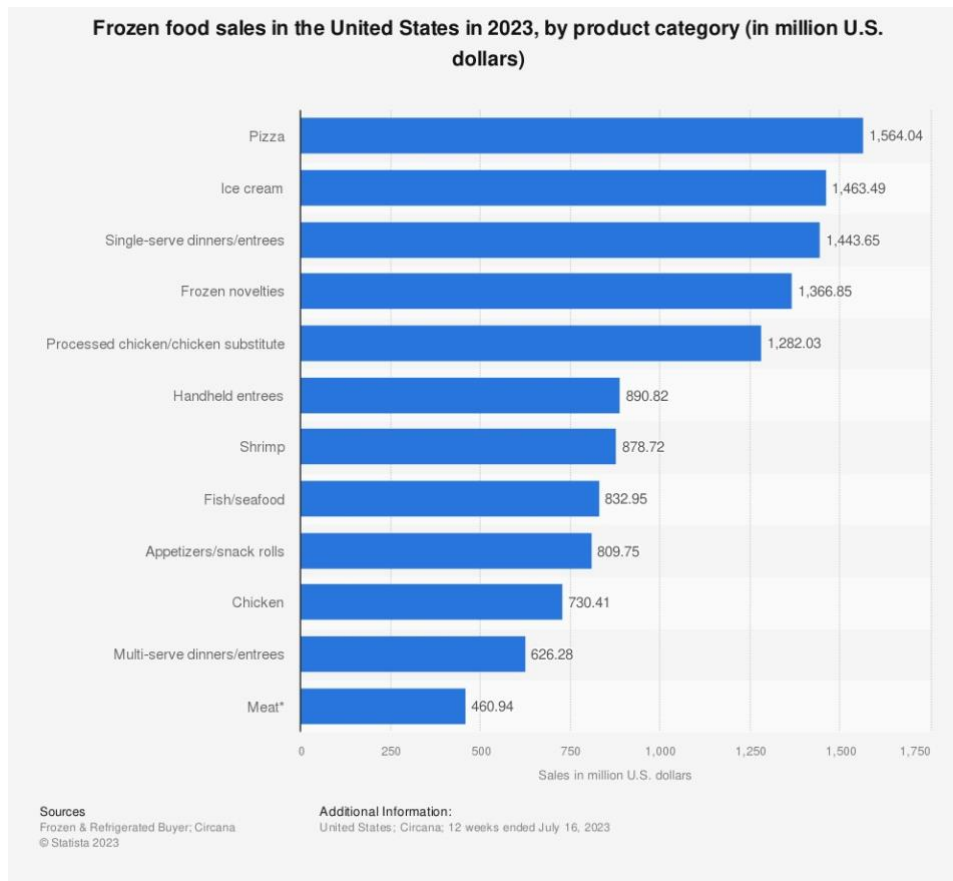
Source: Dti 2023b

## Appendix 5 – Sales Volume Breakdown of the Frozen Food Market in Germany in 2020 to 2022, by Product Group



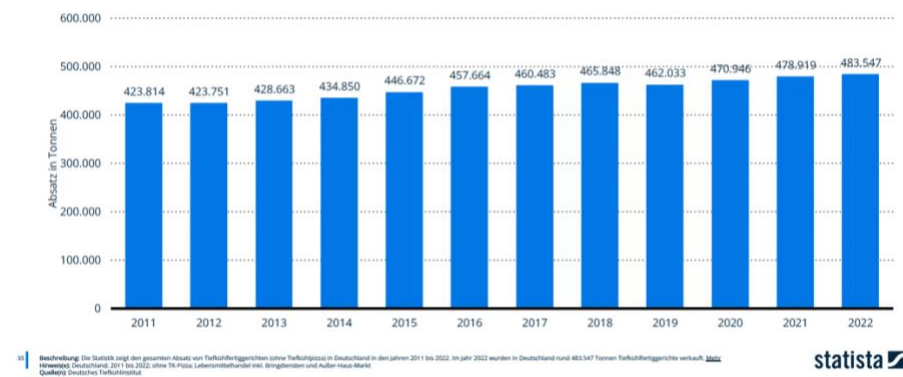
Source: Dti 2023c

## Appendix 6 – Frozen Food Sales in the United States in 2023, by Product Category



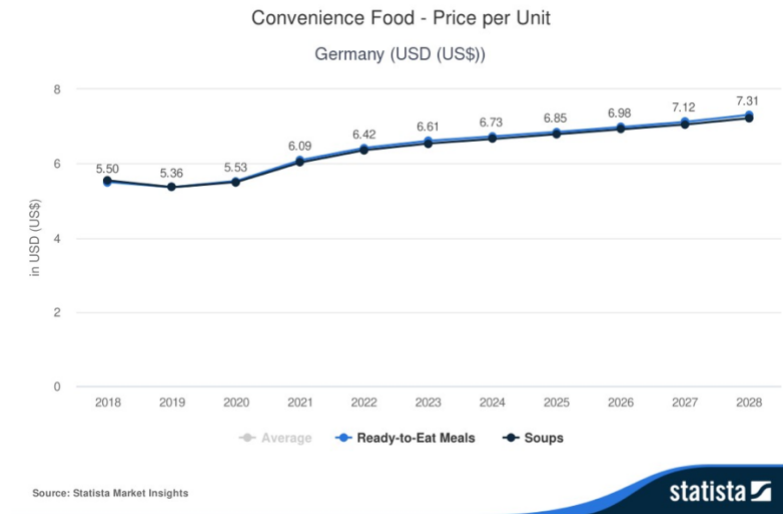
Source: Circana 2023

## Appendix 7 – Sales of Frozen Ready-to-Eat Meals in Germany from 2011 to 2022



Source: Dti 2023a.

## Appendix 8 – Convenience Food – Price Per Unit in Germany

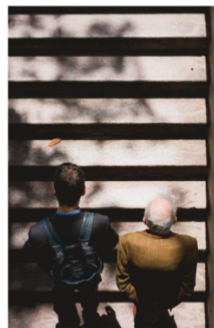
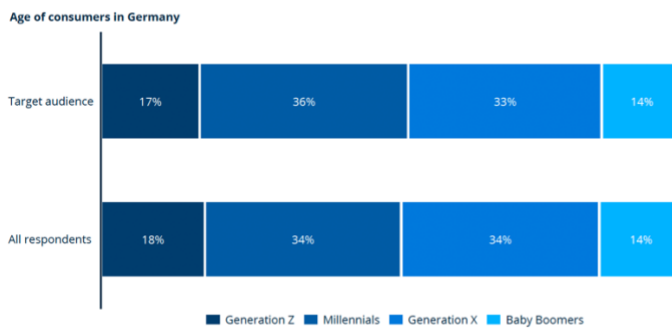


Source: Statista Market Insights 2023b

## Appendix 9 – Ready-to-Eat Meals – Users by Age in Germany

36% of frozen ready-made meal consumers are Millennials

Demographic profile: life stages



Notes: "How old are you?", Single Pick: "Which of these groceries do you consume regularly?" Multi Pick: Base: n=2017 frozen ready-made meal consumers, n=20864 all respondents  
Source: Statista Consumer Insights Global as of August 2023

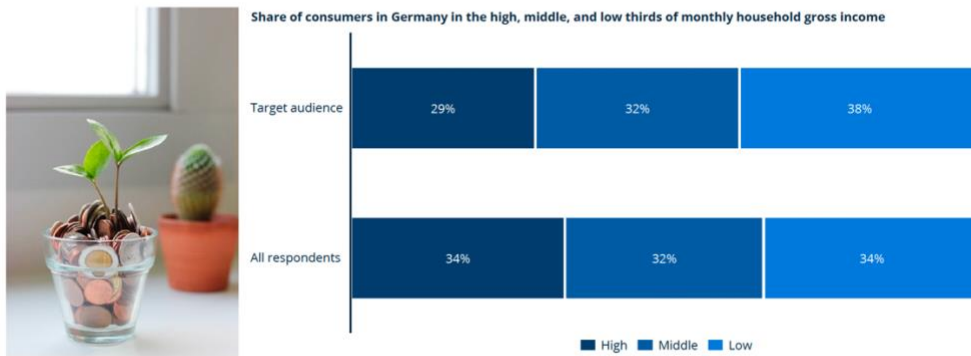
Consumer Insights  
by statista

Source: Statista Consumer Insights 2023

## Appendix 10 – Ready-to-Eat Meals – Users by Income in Germany

38% of frozen ready-made meal consumers have a low annual household income

Demographic profile: income



Notes: Recalculated to only include respondents that provide income information, recode based on "Monthly/annual household income (local currency)"; Single Pick; Which of these groceries do you consume regularly?; Multi Pick; Base: n=1772 frozen ready-made meal consumers, n=30742 all respondents  
Sources: Statista Consumer Insights Global as of August 2023

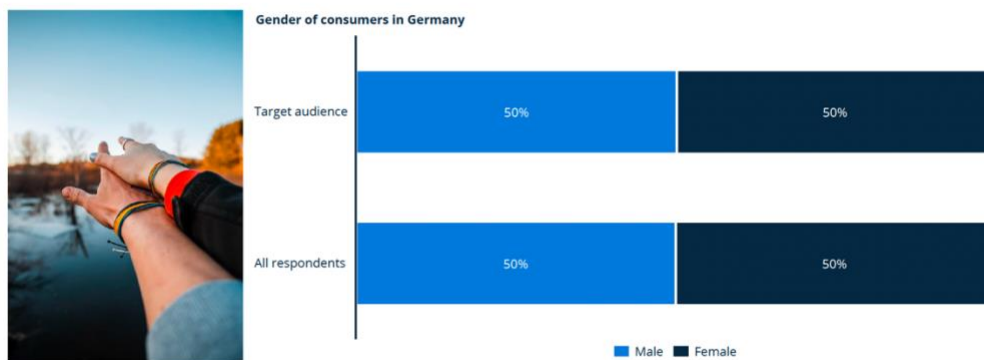
Consumer Insights  
by statista

Source: Statista Consumer Insights 2023

## Appendix 11 – Ready-to-Eat Meals – Users by Gender in Germany

50% of frozen ready-made meal consumers are male

Demographic profile: gender



Notes: "What is your gender?"; Single Pick; Which of these groceries do you consume regularly?; Multi Pick; Base: n=2017 frozen ready-made meal consumers, n=29594 all respondents  
Sources: Statista Consumer Insights Global as of August 2023

Consumer Insights  
by statista

Source: Statista Consumer Insights 2023

## Appendix 12 – Overview of Selected Brands and their Ready-to-Eat Products

Brand	Product Name	Time in Minutes	Product Size in Grams	Price (in €, per 1kg)	Dietary Categories	Package Type
Iglo						
	Tagliatelle Pilz-Pfanne	About 8	450g	7.98€	Vegetarian	Box
	Penne Creme Spinaci	About 8	450g	7.98€	Vegetarian	Box
	Tortelloni Käse-Sahnesauce	About 8	450g	8.98€	Vegetarian	Box
	Kartoffel-Hähnchen Pfanne	About 8	450g	9.98€	Meat	Box
	Veggie Love Reis-Curry mit Gemüse	About 13-14	450g	9.53€	Vegetarian	Bag
	Ravioli mit dem BLUBB und Ricotta-Spinatfüllung	About 11	450g		Vegetarian	Box
	Gnocchi mit Blattspinat	About 13	450g		Vegetarian	Bag
	Pasta Primavera	About 11	450g		Vegetarian	Bag
Frosta						
	Veganes Geschnetzeltes mit Spätzle	About 8	450g	11.76€	Vegan	Bag
	Lasagne Bolognese	About 12 - 35	375g	12.51€	Meat	Box
	Lasagne Grillgemüse	About 12 - 35	375g	12.51€	Vegetarian	Box
	Macaroni & Cheese	About 10 - 25	375g	12.51€	Vegetarian	Box
	Yummy Tummy Soup	About 6	500g	10.58€	Vegan	Bag
	Nom Nom Noodles	About 7	500g	10.58€	Vegan	Bag
	Nice Rice	About 7	500g	9.38€	Vegan	Bag
	Vegane Bratkartoffel Hähnchen Pfanne	About 8	450g	11.76€	Vegan	Bag
	Vegane Hähnchen Paella	About 7	450g	11.76€	Vegan	Bag
	Veganes Bami Goreng	About 8	450g	11.76€	Vegan	Bag
	Veganes Hühner Frikassee	About 8	450g	11.76€	Vegan	Bag
	Hühnerfrikassee	About 6	500g	9.38€	Meat	Bag
	Bami Goreng	About 10	500g	9.38€	Meat	Bag
	Bratkartoffel-Hähnchenpfanne	About 11	500g	9.38€	Meat	Bag
	Hähnchen Curry	About 10	500g	10.58€	Meat	Bag
	Nasi Goreng	About 9	500g	10.58€	Meat	Bag
	Hähnchen-Geschnetzeltes	About 6	500g	9.38€	Meat	Bag
	Hähnchen-Paella	About 12	500g	9.38€	Meat	Bag
	Indian Style Chicken	About 9	500g	10.58€	Meat	Bag
	Spätzle Pfanne	About 12	500g	9.38€	Meat	Bag
	Mexican Style Chicken	About 9	500g	9.38€	Meat	Bag
	Zwiebel Sahne Hähnchen mit Spätzle	About 9	500g	10.58€	Meat	Bag
	Tagliatelle Wildlachs MSC	About 6	450g	10.42€	Fish	Bag

	Wildlachs in Kräuterrahm	About 6	450g	11.76€	Fish	Bag
	MSC Paella	About 11	450g	10.42€	Fish	Bag
	Fettuccine Wildlachs	About 8	450g	11.76€	Fish	Bag
	Steakhouse Pfanne	About 8	450g	11.76€	Meat	Bag
	Bandnudeln in Champignon-Steinpilz Sauce	About 9	500g	10.58€	Vegetarian	Bag
	Tortellini Käse-Sahne	About 9	500g	9.38€	Vegetarian	Bag
	Pappardelle Crème Spinaci	About 7	500g	9.38€	Vegetarian	Bag
	Penne Gorgonzola	About 7	500g	9.38€	Vegetarian	Bag
	Tortellini Tomaten-Sahne	About 8	500g	10.78€	Vegetarian	Bag
	Chili con Quinoa	About 10	500g	10.58€	Vegan	Bag
	Rotes Curry mit Hähnchen und Reis	About 6	375g	9.31€	Meat	Bag
	Tagliatelle Rahm Hähnchen	About 7	375g	9.31€	Meat	Bag
	Rahm Geschnetzeltes mit Hähnchen und Spätzle	About 5	375g	9.31€	Meat	Bag
	Paprika Sahne Hähnchen mit Bandnudeln	About 4	375g	9.31€	Meat	Bag
	Thai Style Hähnchen mit Bandnudeln	About 8	375g	9.31€	Meat	Bag
	Wok Pfanne Hähnchen mit Basmatireis	About 8	375g		Meat	Bag
	Reis Hähnchen Pfanne	About 10	800g	9.74€	Meat	Bag
	Tortellini Rahmspinat	About 8	800g	9.74€	Vegetarian	Bag
	Nudel Hähnchen Pfanne	About 8	800g	9.74€	Meat	Bag
	High Protein Hähnchen & Blumenkohlreis in Teriyaki-Sauce	About 5	400g	13.23€	Meat	Bag
	Bratnudeln Bami Style	About 9	375g		Meat	Box
	Bratkartoffel Pfanne mit Hähnchen	About 9	375g		Meat	Box
	Hühner Frikassee mit Reis und gelben Möhren	About 8	375g		Meat	Box
	Pappardelle Rahmspinat	About 7	375g		Vegetarian	Box
	Pasta Wildlachs	About 6	375g		Fish	Box
	Pfeffer Rahm Hähnchen mit Spätzle	About 8	375g		Meat	Box
	Gemüse Bowl Cremiges Linsen Curry mit Kürbis und Spinat	About 9	480g	7.27€	Vegan	Box
	Gemüse Bowl Gegrillte Zucchini mit Kichererbsen	About 9	480g	8.73€	Vegan	Box
	Gemüse Bowl Kerniges Quinoa mit Erbsen & Grünkohl	About 9	480g	8.73€	Vegan	Box

	Gemüse Bowl Pikanter Bulgur mit schwarzen Bohnen	About 9	480g		Vegan	Box
	Gemüse Bowl Würzige Falafel mit Blumenkohl	About 8	480g		Vegan	Box
	Gemüse Pfanne Asia Curry Küche	About 9	400g		Vegan	Box
	Gemüse Pfanne Kartoffel Champignon	About 9	480g		Vegetarian	Bag
	Gemüse Pfanne Nordische Küche	About 9	400g		Vegetarian	Box
	Gemüse Pfanne Toskanische Küche	About 12	400g		Vegetarian	Box
	Gemüse Pfanne Traditionelle Küche	About 9	400g		Vegetarian	Box
	Gemüse Pfanne Wok Mix	About 9	480g	8.73€	Vegetarian	Bag
	Gemüse Pfanne alla Toscana	About 12	480g	7.27€	Vegetarian	Bag
	Gemüse Pfanne Sommergarten	About 10	480g	7.27€	Vegetarian	Bag
	Gemüse Pfanne à la Provence	About 10	480g	7.27€	Vegan	Bag
	Gemüse Pfanne Style Asia Curry	About 8	480g	7.27€	Vegetarian	Bag
	Gemüse Pfanne Curry Kokos	About 10	480g		Vegan	Bag
	Gemüse Pfanne alla Mediterranea	About 8	480g		Vegan	Bag
	Gemüse Pfanne all' Italiana	About 7	480g		Vegetarian	Bag
Ja!						
	Tortellini in Sahnesauce	About 35-40	400g	4.73€	Meat	
	Penne Gorgonzola mit feinem Blattspinat	About 8-14	750g	3.59€	Vegetarian	
	Cannelloni Vier Käse mit Spinatfüllung	About 35-40	400g	4.73€	Vegetarian	
	Lasagne Bolognese	About 35-40	400g	4.73€	Meat	
	Bami Goreng	About 6-16	750g	4.52€	Meat	
	Makkaroni Auflauf	About 30	400g	0.73€	Meat	
	Nasi Goreng	About 5-14	750g	4.52€	Meat	
	Western Pfanne	About 7-14	750g	4.52€	Meat	
	Bratkartoffelpfanne	About 8 -14	600g	4.82€	Meat	
	Paella Pfanne mit Meeresfrüchten, Seelachsfilet und Hähnchenbrust	About 8-16	750g	4.52€	Fish, Meat	
	Bratnudeln Soja vegan	About 10-14	600g	4.98€	Vegan	
	Nudel Frikadellen Pfanne	About 10-14	600g	4.82€	Meat	
Gut&Günstig						

	Hühnerfrikassee	About 10-25	450g	5.09€	Meat	Box
	Paella	About 14-20	750g	4.52€	Fish, Meat	Bag
	Steakhousepfanne	About 8-12	750g	4.52€	Meat	Bag
	Pfannengemüse "Rustikale Art"	About 6-10	750g		Vegan	
	Pfannengemüse „Asiatische Art“	About 10-14	750g		Vegan	
	Pfannengemüse "Französische Art“	About 6-10	750g		Vegan	
	Hähnchen süß-sauer	About 10-25	500g	5.78€	Meat	
	Fleischklößchen nach ungarischer Art	About 10-25	450g	4.42€	Meat	Box
	Cannelloni Frischkäse- Spinat	About 9-35	400g	4.98€	Vegetarian	Box
	Fettuccine	About 9-35	400g	4.73€	Vegetarian	
	Lasagne Bolognese	About 9-35	400g	4.73€	Meat	Box
	Tortelloni Schinken	About 9-35	400g	4.98€	Meat	
	Tortelloni Käse-Sahne	About 8-12	750g	3.59€	Vegetarian	
	Pastapfanne	About 12-16	750g	4.52€	Meat	Bag
	Bami Goreng	About 13-20	750g	4.52€	Meat	Bag
	Penne Gorgonzola	About 8-12	750g	3.59€	Vegetarian	
	Nasi Goreng	About 16-20	750g	4.52€	Meat	Bag

## Appendix 58 – Attributes and Levels Overview

**Product attributes**

Brand

This attribute represents the brand name, SKU, or pricing Ser.

Cooking time

This attribute is a feature of the product.

Cooking method

This attribute is a feature of the product.

Meal type

This attribute is a feature of the product.

**Levels (i.e., what the attributes can be like)**

Frosta	Frosta			
Iglo	Iglo			
Jal	Jal			
Gut&Günstig	Gut&Günstig			
5 minutes				
12 minutes				
20 minutes				
Pan				
Oven				
Microwave				
Comfort / Convenience Meals				
Health / Fitness Meals				
Vegetarian / Vegan Meals				

Ingredients/ Nutritional value	Feature	All-natural / organic emphasis		
This attribute is a feature of the product.		Low-calorie / light option		
		No additives / flavor enhancers		
		Locally sourced / sustainable		
Price (per serving)	Price	2.99€	Just the number: 2,99	
This attribute is a price paid by customers.		3.99€	Just the number: 3,99	
		4.99€	Just the number: 4,99	
Meal size	Feature	Single Serving (Portion for 1)		
This attribute is a feature of the product.		Couple Serving (Portion for 2)		
		Family Sized Serving (Portion for >3)		

## Appendix 59 – Attributes and Levels per Brand

Levels	Frosta	Iglo	Ja!	Gut&Günstig
<b>Cooking time</b>				
5 minutes	✓	✓	✓	✓
12 minutes	✓	✓	✓	✓
20 minutes	✓	✓	✓	✓
<b>Cooking method</b>				
Pan	✓	✓	✓	✓
Oven	✓	✓	✓	✓
Microwave	✓	✓	✓	✓
<b>Meal type</b>				
Comfort / Convenience Meals	✓	✓	✓	✓
Health / Fitness Meals	✓	✓	✓	✓
Vegetarian / Vegan Meals	✓	✓	✓	✓
<b>Ingredients/ Nutritional value</b>				
All-natural / organic emphasis	✓	✓	✓	✓
Low-calorie / light option	✓	✓	✓	✓
No additives / flavor enhancers	✓	✓	✓	✓
Locally sourced / sustainable	✓	✓	✓	✓
<b>Price (per serving)</b>				
2.99€	✓	✓	✓	✓
3.99€	✓	✓	✓	✓
4.99€	✓	✓	✓	✓
<b>Meal size</b>				
Single Serving (Portion for 1)	✓	✓	✓	✓
Couple Serving (Portion for 2)	✓	✓	✓	✓
Family Sized Serving (Portion for >3)	✓	✓	✓	✓

## Appendix 60 – Additional Questions

How often do you eat frozen ready-to-eat meals?

2-4 times per week	Once a week	Every two weeks
Once a month	Every few months	Almost never

What is your Age?

<18	18-27	28-46
47-58	>59	

What is your Gender?

Female	Male	Other
Prefer not to say		

What is your education level?

None	"Mittlere Reife" (GCSEs)	"Abitur" (A-Level/High school)
"Ausbildung" (Apprenticeship)	Bachelor	Master
Doctorate	Prefer not to say	

What is your occupation?

Student	Employed	Self-employed
Unemployed	Retired	Prefer not to say

Please indicate your living arrangements

Single Household	Living with Flatmates	Living with a Partner
Living with a Family		

Would you like to share any other thoughts about this product?

Type here

## Appendix 61 – Report Tabs Conjoint.ly

Insights

Time series

Crosstab

Simulations

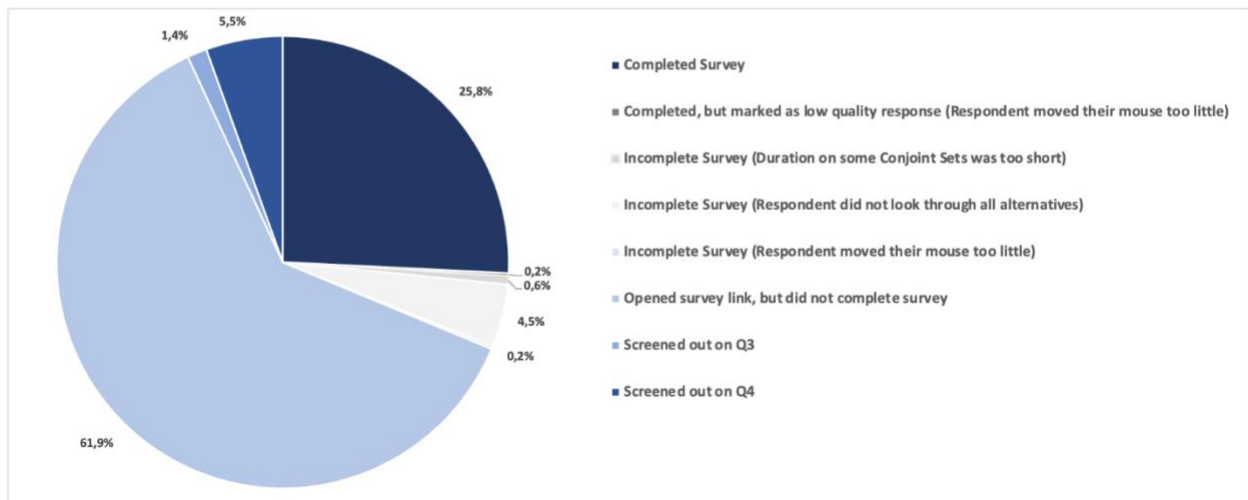
Pivot tables

Segmentation

Weights

## Appendix 62 – Viable Participants

Participation Viability	Respondents count by status (Percentage)	Respondents count by status (Absolute Numbers)
Completed Survey	25,8%	125
Completed, but marked as low quality response (Respondent moved their mouse too little)	0,2%	1
Incomplete Survey (Duration on some Conjoint Sets was too short)	0,6%	3
Incomplete Survey (Respondent did not look through all alternatives)	4,5%	22
Incomplete Survey (Respondent moved their mouse too little)	0,2%	1
Opened survey link, but did not complete survey	61,9%	305
Screened out on Q3	1,4%	7
Screened out on Q4	5,5%	27



## Appendix 63 – Time Series of Participation

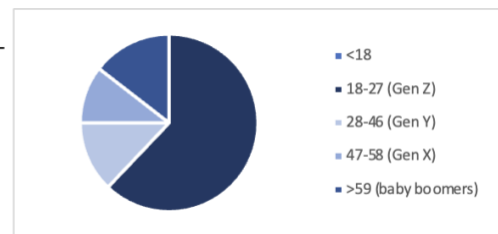
Period	Start	End	Number of participants	Actions
Wave 1	24 October 2023 08:54 AM UTC	1 November 2023 01:55 PM UTC	76	
Wave 2	1 November 2023 01:55 PM UTC	9 November 2023 06:56 PM UTC	49	

## Appendix 64 – Location Distribution of Participants



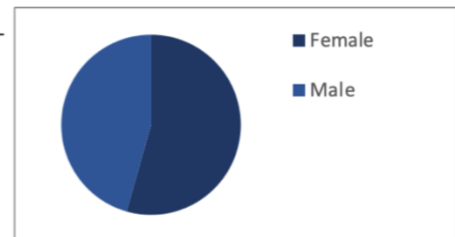
## Appendix 65 – Age Demographics

Age Group	Count by Demographic
<18	0,0%
18-27 (Gen Z)	61,6%
28-46 (Gen Y)	12,8%
47-58 (Gen X)	10,4%
>59 (baby boomers)	14,4%



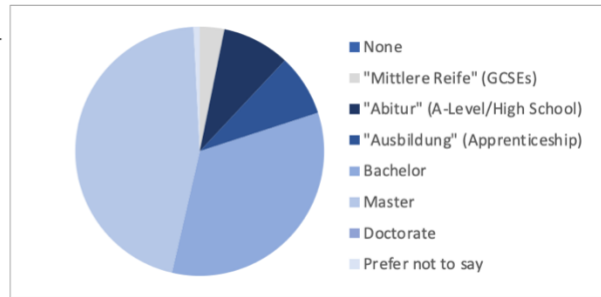
## Appendix 66 – Gender Demographics

Gender Group	Count by Demographic
Female	54,4%
Male	45,6%
Other	0,0%
Prefer not so say	0,0%



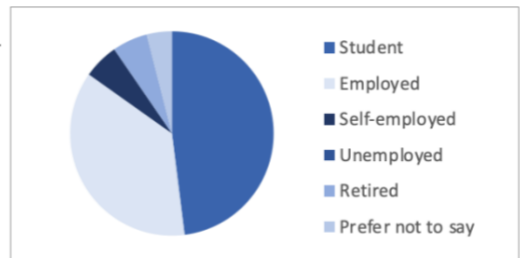
## Appendix 67 – Educational Demographics

Education Group	Count by Demographic
None	0,0%
"Mittlere Reife" (GCSEs)	3,2%
"Abitur" (A-Level/High School)	8,8%
"Ausbildung" (Apprenticeship)	8,0%
Bachelor	33,6%
Master	45,6%
Doctorate	0,0%
Prefer not to say	0,8%



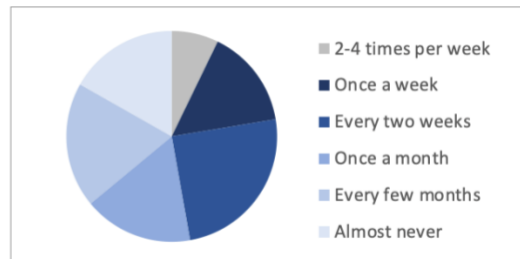
## Appendix 68 – Occupational Demographics

Occupation Group	Count by Demographic
Student	48,0%
Employed	36,8%
Self-employed	5,6%
Unemployed	0,0%
Retired	5,6%
Prefer not to say	4,0%



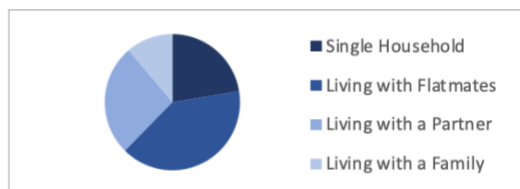
## Appendix 69 – Frequency of Frozen Ready-to-Eat Meal

Frequency of Frozen RTE meals Group	Count by Demographic
2-4 times per week	7,2%
Once a week	15,2%
Every two weeks	24,8%
Once a month	16,8%
Every few months	19,2%
Almost never	16,8%

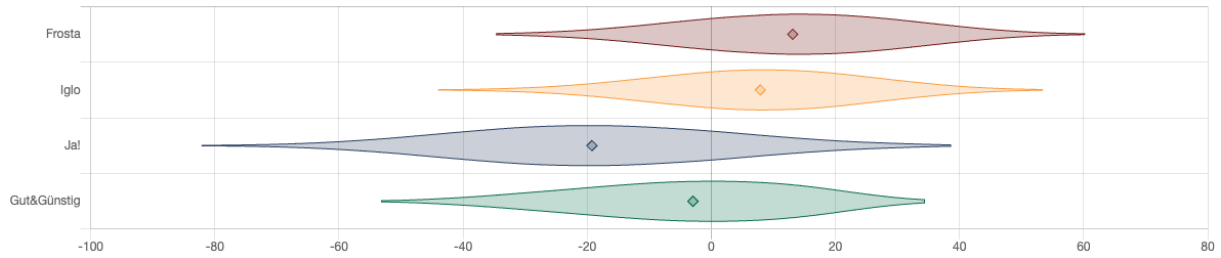


## Appendix 70 – Living Arrangements

Living Arrangements Group	Count by Demographic
Single Household	22,4%
Living with Flatmates	40,0%
Living with a Partner	26,4%
Living with a Family	11,2%

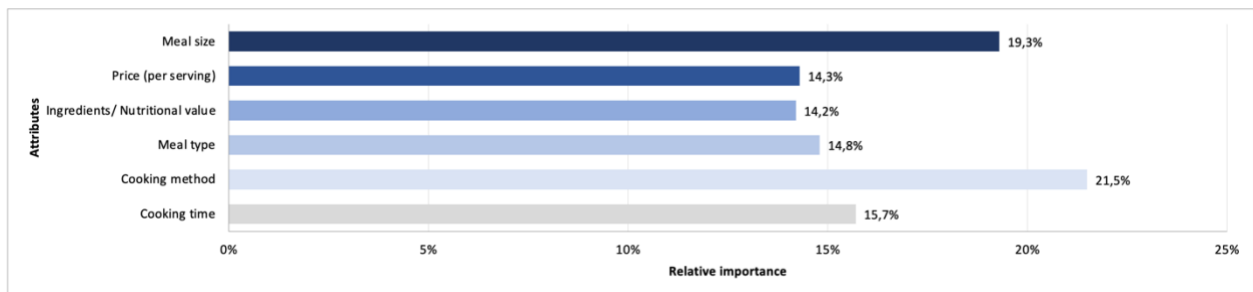


## Appendix 71 – Brand Preferences

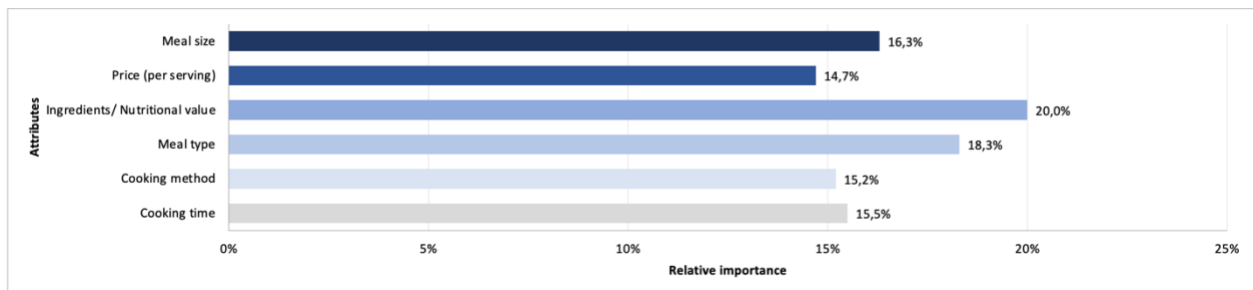


## Appendix 72 – Attribute Preferences Across Brands

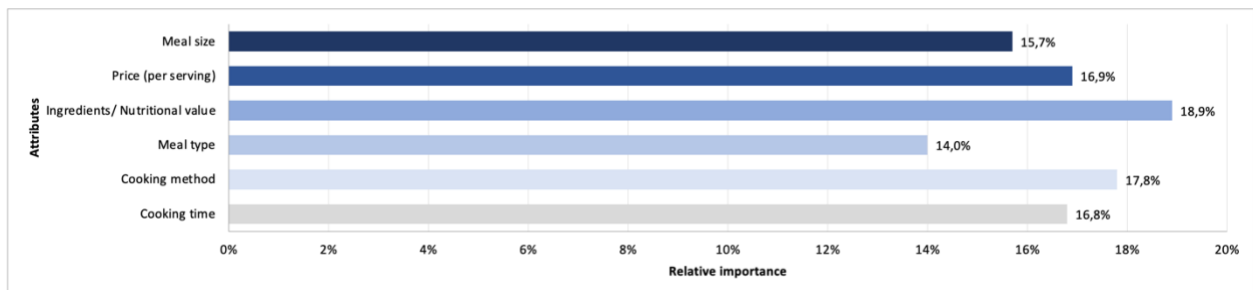
### Attribute Importance: Frosta



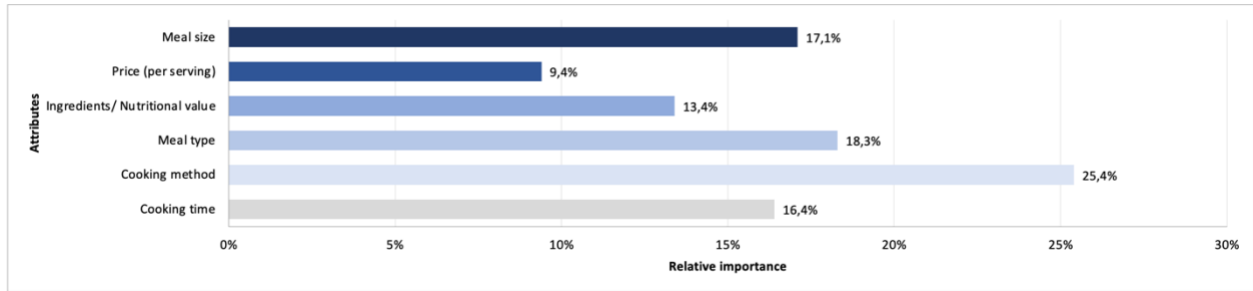
### Attribute importance: Iglo



### Attribute importance: Ja!



**Attribute importance: Gut&Günstig**



### Appendix 73 – Average Attribute Preference Across Brands

Average Attribute Preference across brands	
<b>Meal size</b>	17,1%
<b>Price (per serving)</b>	13,8%
<b>Ingredients/ Nutritional Value</b>	17,9%
<b>Meal type</b>	16,4%
<b>Cooking method</b>	20,0%
<b>Cooking time</b>	16,1%

## Appendix 74 – Level Preferences Across Brands

FROSTA



### Meal size

Single Serving (Portion for 1)	-4,0%
Couple Serving (Portion for 2)	7,0%
Family Sized Serving (Portion for >3)	-3,0%

### Price (per serving)

2,99 €	10,1%
3,99 €	-0,9%
4,99 €	-9,2%

### Ingredients/ Nutritional Value

All-natural/ organic emphasis	3,7%
Low-calorie/ light option	-5,5%
No additives/ flavor enhancers	-4,0%
Locally sourced/ sustainable	5,8%

### Meal type

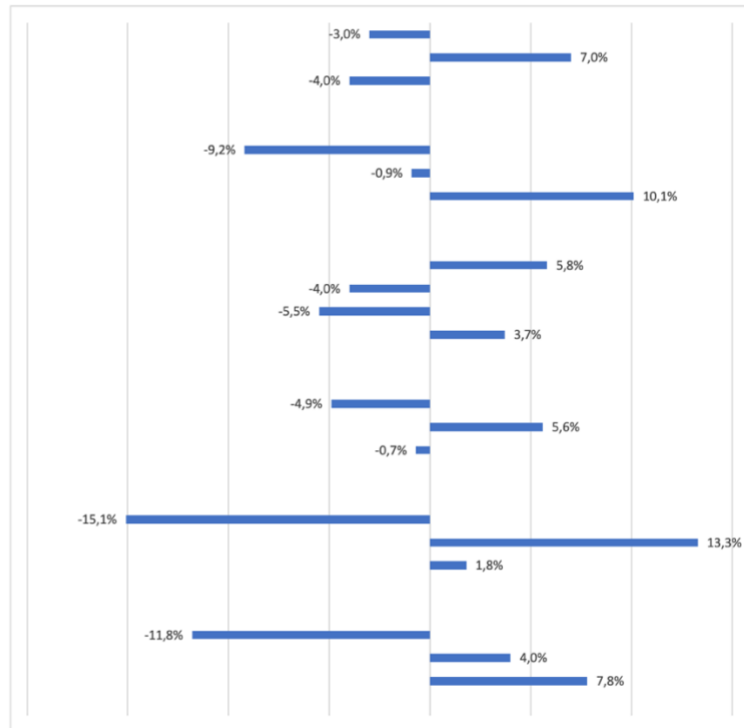
Comfort/ Convenience Meals	-0,7%
Health/ Fitness Meals	5,6%
Vegetarian/ Vegan Meals	-4,9%

### Cooking method

Pan	1,8%
Oven	13,3%
Microwave	-15,1%

### Cooking time

5 minutes	7,8%
12 minutes	4,0%
20 minutes	-11,8%





**Meal size**

Single Serving (Portion for 1)	0,7%
Couple Serving (Portion for 2)	7,4%
Family Sized Serving (Portion for >3)	-8,1%

**Price (per serving)**

2,99 €	8,1%
3,99 €	1,8%
4,99 €	-9,8%

**Ingredients/ Nutritional Value**

All-natural/ organic emphasis	10,2%
Low-calorie/ light option	-3,5%
No additives/ flavor enhancers	-12,4%
Locally sourced/ sustainable	5,7%

**Meal type**

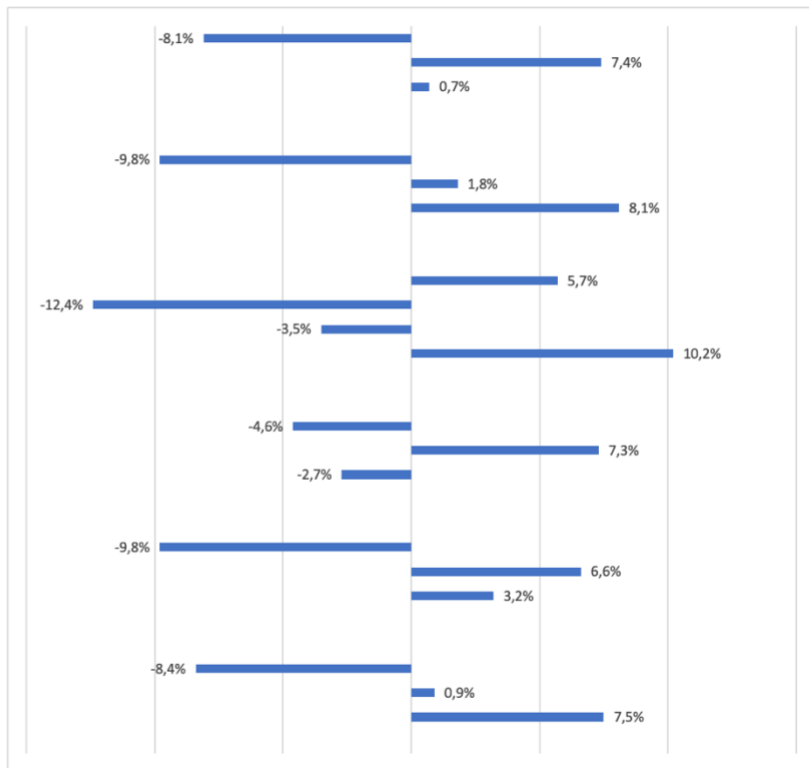
Comfort/ Convenience Meals	-2,7%
Health/ Fitness Meals	7,3%
Vegetarian/ Vegan Meals	-4,6%

**Cooking method**

Pan	3,2%
Oven	6,6%
Microwave	-9,8%

**Cooking time**

5 minutes	7,5%
12 minutes	0,9%
20 minutes	-8,4%



**Ja!**

**Meal size**

Single Serving (Portion for 1)	0,5%
Couple Serving (Portion for 2)	4,6%
Family Sized Serving (Portion for >3)	-5,1%

**Price (per serving)**

2,99 €	14,0%
3,99 €	-3,0%
4,99 €	-11,0%

**Ingredients/ Nutritional Value**

All-natural/ organic emphasis	7,0%
Low-calorie/ light option	0,6%
No additives/ flavor enhancers	-9,8%
Locally sourced/ sustainable	2,2%

**Meal type**

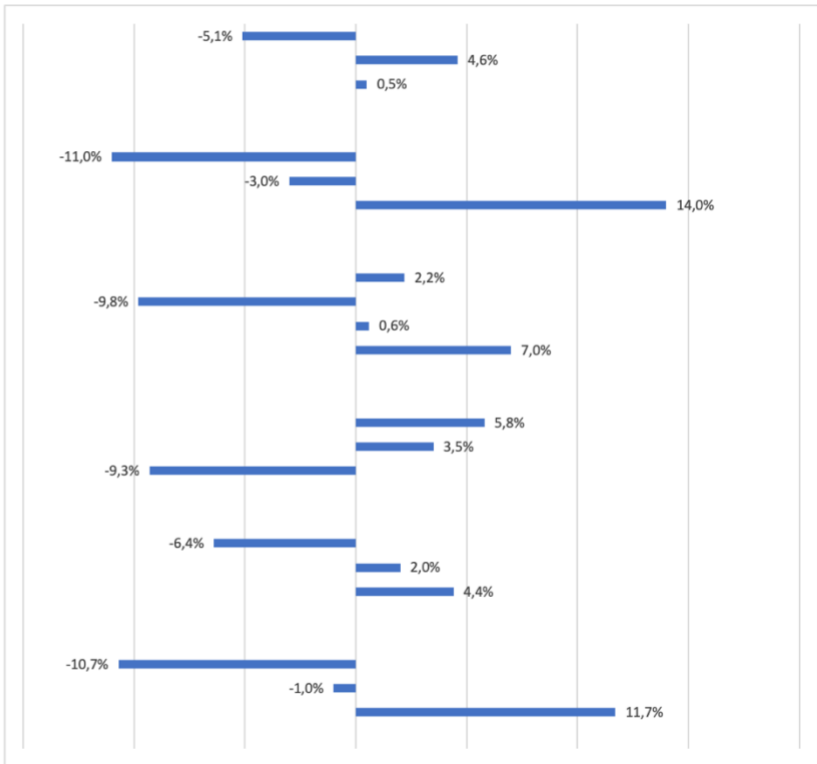
Comfort/ Convenience Meals	-9,3%
Health/ Fitness Meals	3,5%
Vegetarian/ Vegan Meals	5,8%

**Cooking method**

Pan	4,4%
Oven	2,0%
Microwave	-6,4%

**Cooking time**

5 minutes	11,7%
12 minutes	-1,0%
20 minutes	-10,7%



**Gut & Günstig**

**Meal size**

Single Serving (Portion for 1)	4,8%
Couple Serving (Portion for 2)	3,5%
Family Sized Serving (Portion for >3)	-8,3%

**Price (per serving)**

2,99 €	10,3%
3,99 €	-1,9%
4,99 €	-8,4%

**Ingredients/ Nutritional Value**

All-natural/ organic emphasis	3,0%
Low-calorie/ light option	-6,6%
No additives/ flavor enhancers	-2,0%
Locally sourced/ sustainable	5,6%

**Meal type**

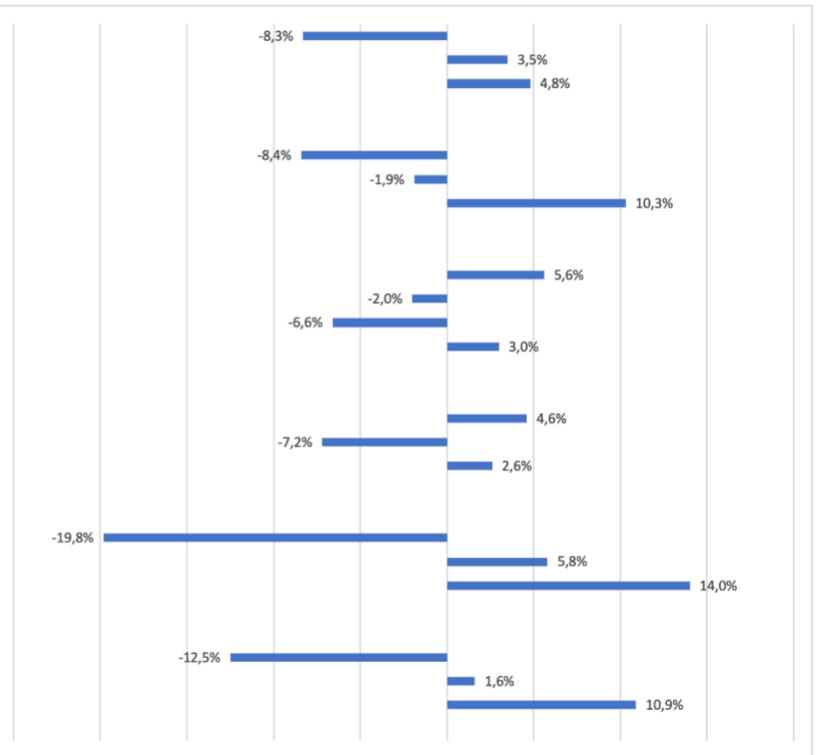
Comfort/ Convenience Meals	2,6%
Health/ Fitness Meals	-7,2%
Vegetarian/ Vegan Meals	4,6%

**Cooking method**

Pan	14,0%
Oven	5,8%
Microwave	-19,8%

**Cooking time**

5 minutes	10,9%
12 minutes	1,6%
20 minutes	-12,5%



## Appendix 75 – Age Conjoint Analysis

<b>BRAND / AGE</b>	<b>18-27 (GenZ)</b>	<b>28-46 (Gen Y)</b>	<b>47-58 (Gen X)</b>	<b>&gt;59 (baby boomers)</b>
<b>Frosta</b>	13,1385	5,2672	20,8658	19,9337
<b>Iglo</b>	7,2154	8,1759	3,3024	14,8089
<b>Gut &amp; Günstig</b>	-0,316	-3,8293	-5,003	-6,2491
<b>Jal</b>	-18,4594	-9,6001	-19,5363	-27,7532

FROSTA				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
Cooking method	20,8%	21,3%	17,3%	28,4%
Meal size	18,9%	17,9%	23,4%	19,2%
Cooking time	15,6%	16,9%	20,9%	11,3%
Meal type	15,9%	15,3%	12,1%	12,0%
Price (per serving)	14,5%	14,9%	15,7%	12,7%
Ingredients/ Nutritional value	14,3%	13,7%	10,5%	16,4%
Sum	100%	100%	100%	100%

FROSTA				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
5 minutes	7,6%	8,0%	10,2%	3,2%
12 minutes	3,4%	3,0%	10,3%	1,3%
20 minutes	-11,0%	-11,0%	-20,5%	-4,5%
Pan	1,5%	3,3%	2,7%	0,8%
Oven	12,2%	15,3%	2,0%	18,3%
Microwave	-13,7%	-18,6%	-4,7%	-19,1%
Comfort / Convenience Meals	-1,3%	-3,3%	1,5%	2,0%
Health / Fitness Meals	7,9%	3,9%	-1,5%	1,0%
Vegetarian / Vegan Meals	-6,6%	-0,6%	0,0%	-3,0%
All-natural / organic emphasis	3,0%	3,3%	4,7%	4,6%
Low-calorie / light option	-4,6%	-4,9%	-4,9%	-6,2%
No additives / flavor enhancers	-3,5%	-3,5%	-0,8%	-6,8%
Locally sourced / sustainable	5,2%	5,1%	0,9%	8,4%
2.99€	10,7%	12,3%	12,4%	1,3%
3.99€	0,0%	0,2%	-0,9%	-4,8%
4.99€	-10,7%	-12,5%	-11,5%	3,5%
Single Serving (Portion for 1)	-3,6%	-2,9%	-16,5%	2,9%
Couple Serving (Portion for 2)	6,1%	0,7%	8,9%	11,9%
Family Sized Serving (Portion for >3)	-2,5%	2,2%	7,7%	-14,8%

IGLO				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
Cooking method	14,9%	15,1%	11,0%	19,7%
Meal size	15,5%	14,6%	16,8%	20,5%
Cooking time	14,9%	14,4%	18,2%	17,3%
Meal type	19,6%	18,3%	16,3%	13,5%
Price (per serving)	14,9%	16,5%	16,7%	11,4%
Ingredients/ Nutritional value	20,2%	21,1%	21,1%	17,7%
Sum	100%	100%	100%	100%

IGLO				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
5 minutes	7,4%	3,1%	7,9%	7,0%
12 minutes	0,8%	7,5%	3,6%	-7,6%
20 minutes	-8,2%	10,5%	11,4%	0,6%
Pan	2,5%	2,4%	1,3%	7,1%
Oven	6,8%	8,7%	2,7%	4,2%
Microwave	-9,3%	11,1%	-3,9%	-11,3%
Comfort / Convenience Meals	-2,6%	-7,1%	-4,5%	4,6%
Health / Fitness Meals	7,6%	5,7%	12,0%	-0,7%
Vegetarian / Vegan Meals	-5,0%	1,3%	-7,5%	-3,9%
All-natural / organic emphasis	9,7%	9,7%	11,2%	5,8%
Low-calorie / light option	-1,7%	0,3%	-4,5%	-13,4%
No additives / flavor enhancers	14,3%	13,3%	-8,3%	1,7%
Locally sourced / sustainable	6,2%	3,3%	1,5%	6,0%
2.99€	7,8%	8,6%	11,3%	1,4%
3.99€	2,8%	0,5%	1,4%	-2,8%
4.99€	-10,6%	-9,0%	12,7%	1,4%
Single Serving (Portion for 1)	1,4%	-1,2%	-7,0%	6,5%
Couple Serving (Portion for 2)	6,1%	5,0%	4,2%	14,2%
Family Sized Serving (Portion for >3)	-7,4%	-3,8%	2,8%	-20,7%

JAI				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
Cooking method	16,6%	17,0%	16,8%	24,0%
Meal size	15,3%	15,5%	15,8%	17,4%
Cooking time	16,9%	18,4%	20,4%	12,3%
Meal type	14,0%	15,2%	13,3%	13,5%
Price (per serving)	18,1%	13,4%	16,8%	14,8%
Ingredients/ Nutritional value	19,1%	20,5%	16,9%	18,0%
Sum	100%	100%	100%	100%













JAI				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
5 minutes	11,8%	11,3%	17,1%	5,1%
12 minutes	-1,3%	2,1%	-1,7%	-2,1%
20 minutes	-10,5%	-13,3%	-15,4%	-3,0%
Pan	4,6%	1,6%	-0,1%	7,9%
Oven	-0,1%	7,1%	3,6%	4,7%
Microwave	-4,5%	-8,8%	-3,5%	-12,6%
Comfort / Convenience Meals	-9,1%	-9,9%	-7,7%	-8,6%
Health / Fitness Meals	4,9%	1,4%	1,3%	0,7%
Vegetarian / Vegan Meals	4,2%	8,5%	6,4%	7,9%
All-natural / organic emphasis	7,0%	5,8%	9,0%	4,4%
Low-calorie / light option	1,9%	-1,5%	-2,0%	-0,5%
No additives / flavor enhancers	-9,4%	-10,2%	-3,9%	-12,4%
Locally sourced / sustainable	0,4%	5,8%	-3,1%	8,4%
2.99€	15,5%	9,4%	11,2%	10,8%
3.99€	-2,9%	-1,9%	0,2%	-5,4%
4.99€	-12,6%	-7,5%	-11,4%	-5,3%
Single Serving (Portion for 1)	0,1%	-1,1%	-6,1%	7,2%
Couple Serving (Portion for 2)	5,0%	4,6%	1,3%	3,7%
Family Sized Serving (Portion for >3)	-5,1%	-3,6%	4,8%	-10,9%







































GUT & GÜNSTIG				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
Cooking method	23,9%	25,2%	22,5%	34,6%
Meal size	17,6%	16,2%	14,5%	16,7%
Cooking time	16,6%	15,7%	20,7%	14,1%
Meal type	17,9%	23,1%	18,6%	15,7%
Price (per serving)	9,9%	8,1%	7,7%	10,0%
Ingredients/ Nutritional value	14,1%	11,7%	16,1%	8,9%
Sum	100%	100%	100%	100%

GUT & GÜNSTIG				
ATTRIBUTE / AGE	18-27 (Gen Z)	28-46 (Gen Y)	47-58 (Gen X)	>59 (baby boomers)
5 minutes	11,9%	11,4%	10,6%	3,3%
12 minutes	0,7%	-1,4%	4,2%	3,8%
20 minutes	-12,5%	10,0%	14,8%	-7,0%
Pan	13,1%	11,0%	10,2%	14,7%
Oven	5,5%	9,3%	-5,5%	10,1%
Microwave	-18,6%	-20,3%	-4,7%	-24,8%
Comfort / Convenience Meals	2,8%	-2,4%	-1,1%	6,8%
Health / Fitness Meals	-5,0%	-9,6%	11,0%	-5,5%
Vegetarian / Vegan Meals	2,2%	12,0%	12,1%	-1,3%
All-natural / organic emphasis	6,5%	1,6%	9,3%	6,1%
Low-calorie / light option	-2,1%	-5,6%	-7,5%	-1,2%
No additives / flavor enhancers	-8,4%	-3,6%	-4,9%	-7,2%
Locally sourced / sustainable	4,0%	7,4%	3,1%	2,3%
2.99€	7,9%	6,8%	6,0%	8,2%
3.99€	-2,0%	-2,4%	-2,4%	-3,1%
4.99€	-5,9%	-4,4%	-3,6%	-5,1%
Single Serving (Portion for 1)	4,6%	2,8%	-2,2%	9,4%
Couple Serving (Portion for 2)	5,1%	0,0%	-2,1%	3,4%
Family Sized Serving (Portion for >3)	-9,7%	-2,8%	4,3%	-12,8%

## Appendix 76 – Gender Conjoint Analysis

BRAND / AGE	Female	Male
Frosta	15,5147	11,1065
Iglo	7,5663	8,0994
Gut & Günstig	-2,9938	-2,9981
Ja!	-21,1538	-16,861

FROSTA				
ATTRIBUTE / AGE	Female	Male		
Cooking method		20,4%		19,6%
Meal size		18,3%		18,3%
Cooking time		16,4%		16,2%
Meal type		16,0%		15,0%
Price (per serving)		14,9%		15,6%
Ingredients/ Nutritional value		14,2%		15,4%
Sum		100%		100%

FROSTA				
ATTRIBUTE / AGE	Female	Male		
5 minutes		8,0%		7,4%
12 minutes		3,6%		4,3%
20 minutes		11,6%		11,6%
Pan		2,4%		1,2%
Oven		13,0%		13,3%
Microwave		15,4%		14,5%
Comfort / Convenience Meals		-3,1%		1,6%
Health / Fitness Meals		4,5%		6,5%
Vegetarian / Vegan Meals		-1,4%		-8,1%
All-natural / organic emphasis		4,2%		3,2%
Low-calorie / light option		-5,7%		-5,2%
No additives / flavor enhancers		-5,4%		-2,6%
Locally sourced / sustainable		6,9%		4,5%
2.99€		9,9%		10,0%
3.99€		-1,0%		-0,8%
4.99€		-8,9%		-9,2%
Single Serving (Portion for 1)		-3,7%		-4,1%
Couple Serving (Portion for 2)		8,3%		5,6%
Family Sized Serving (Portion for >3)		-4,7%		-1,5%

IGLO				
ATTRIBUTE / AGE	Female		Male	
Cooking method		14,9%		15,6%
Meal size		16,4%		16,2%
Cooking time		16,0%		15,0%
Meal type		18,3%		18,3%
Price (per serving)		14,2%		15,4%
Ingredients/ Nutritional value		20,4%		19,6%
Sum		100%		100%

IGLO				
ATTRIBUTE / AGE	Female		Male	
5 minutes		6,9%		7,8%
12 minutes		1,5%		0,4%
20 minutes		-8,3%		-8,2%
Pan		3,8%		2,6%
Oven		6,6%		6,4%
Microwave		-10,4%		-9,0%
Comfort / Convenience Meals		-3,7%		-1,8%
Health / Fitness Meals		4,8%		9,5%
Vegetarian / Vegan Meals		-1,1%		-7,7%
All-natural / organic emphasis		11,6%		8,6%
Low-calorie / light option		-3,1%		-3,8%
No additives / flavor enhancers		-13,6%		-11,0%
Locally sourced / sustainable		5,1%		6,1%
2.99€		8,0%		8,0%
3.99€		1,2%		2,2%
4.99€		-9,2%		-10,2%
Single Serving (Portion for 1)		2,3%		-0,7%
Couple Serving (Portion for 2)		7,3%		7,2%
Family Sized Serving (Portion for >3)		-9,6%		-6,5%

JAI				
ATTRIBUTE / AGE	Female		Male	
Cooking method		17,4%		18,2%
Meal size		16,1%		15,3%
Cooking time		17,0%		16,5%
Meal type		13,5%		14,6%
Price (per serving)		17,1%		16,7%
Ingredients/ Nutritional value		19,0%		18,7%
Sum		100%		100%

JAI				
ATTRIBUTE / AGE	Female		Male	
5 minutes		10,2%		13,7%
12 minutes		1,1%		-3,9%
20 minutes		-11,3%		-9,8%
Pan		4,4%		4,5%
Oven		1,8%		2,3%
Microwave		-6,1%		-6,9%
Comfort / Convenience Meals		-9,2%		-9,7%
Health / Fitness Meals		2,6%		4,8%
Vegetarian / Vegan Meals		6,5%		4,9%
All-natural / organic emphasis		7,2%		6,7%
Low-calorie / light option		-0,4%		2,1%
No additives / flavor enhancers		-10,1%		-9,5%
Locally sourced / sustainable		3,3%		0,7%
2.99€		13,8%		14,4%
3.99€		-3,4%		-2,4%
4.99€		-10,4%		-12,0%
Single Serving (Portion for 1)		0,9%		-0,1%
Couple Serving (Portion for 2)		5,0%		4,1%
Family Sized Serving (Portion for >3)		-5,8%		-4,0%

GUT & GÜNSTIG				
ATTRIBUTE / AGE	Female		Male	
Cooking method		25,3%		25,5%
Meal size		18,8%		15,1%
Cooking time		15,1%		18,0%
Meal type		18,9%		17,5%
Price (per serving)		9,0%		10,0%
Ingredients/ Nutritional value		13,0%		13,8%
Sum		100%		100%

GUT & GÜNSTIG				
ATTRIBUTE / AGE	Female		Male	
5 minutes		9,9%		1,7%
12 minutes		1,6%		1,6%
20 minutes		-1,5%		-3,3%
Pan		5,3%		2,1%
Oven		4,0%		7,7%
Microwave		-9,3%		-9,8%
Comfort / Convenience Meals		0,8%		4,5%
Health / Fitness Meals		-8,4%		-5,5%
Vegetarian / Vegan Meals		7,7%		1,1%
All-natural / organic emphasis		3,7%		3,7%
Low-calorie / light option		0,5%		-1,2%
No additives / flavor enhancers		-7,1%		-6,6%
Locally sourced / sustainable		3,9%		4,1%
2.99€		1,3%		5,1%
3.99€		-1,4%		-3,4%
4.99€		-9,9%		-1,7%
Single Serving (Portion for 1)		5,8%		3,5%
Couple Serving (Portion for 2)		3,8%		3,0%
Family Sized Serving (Portion for >3)		-9,7%		-6,4%

## Appendix 77 – Education Conjoint Analysis

BRAND / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
Frosta	22,3906	16,7914	5,7613	10,7938	15,4957	4,6673
Iglo	-1,0251	17,7968	5,843	8,389	6,7783	1,6906
Gut & Günstig	-10,4694	-10,5082	-1,9354	-0,1732	-3,1104	-7,2702
Ja!	-16,7447	-29,2735	-7,7327	-19,0027	-19,6194	-0,5469

FROSTA							
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say	
Cooking method	12,6%	20,9%	27,5%	20,3%	22,4%	8,7%	
Meal size	20,9%	21,6%	17,1%	20,4%	18,4%	18,9%	
Cooking time	14,7%	15,7%	16,6%	15,2%	15,9%	18,0%	
Meal type	14,2%	11,5%	11,5%	16,6%	14,9%	12,0%	
Price (per serving)	22,4%	12,4%	14,4%	14,1%	14,2%	16,9%	
Ingredients/ Nutritional value	15,2%	17,9%	12,9%	13,3%	14,2%	25,6%	
Sum	100%	100%	100%	100%	100%	100%	

FROSTA							
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say	
5 minutes	4,6%	6,0%	6,0%	6,9%	8,0%	10,7%	
12 minutes	-2,9%	9,4%	3,8%	3,1%	3,7%	-7,3%	
20 minutes	-1,7%	-15,4%	-9,9%	10,0%	11,7%	-3,4%	
Pan	4,0%	1,9%	3,6%	1,0%	1,6%	-2,9%	
Oven	-0,3%	10,1%	15,5%	10,7%	14,5%	-2,9%	
Microwave	-3,7%	-12,1%	19,2%	11,6%	16,1%	5,8%	
Comfort / Convenience Meals	-1,2%	6,4%	-2,7%	-0,8%	-1,3%	-5,5%	
Health / Fitness Meals	8,5%	-2,3%	-4,2%	9,5%	5,8%	-1,1%	
Vegetarian / Vegan Meals	-7,3%	-4,1%	7,0%	-8,7%	-4,5%	6,5%	
All-natural / organic emphasis	4,0%	6,3%	5,9%	2,2%	3,6%	-10,2%	
Low-calorie / light option	-1,2%	-7,6%	-7,4%	-2,6%	-6,2%	2,1%	
No additives / flavor enhancers	-12,5%	-5,4%	-1,6%	-4,7%	-3,2%	15,4%	
Locally sourced / sustainable	9,7%	6,7%	3,1%	5,1%	5,9%	-7,3%	
2.99€	10,4%	4,2%	9,1%	11,7%	8,9%	5,9%	
3.99€	-1,6%	-4,9%	0,0%	-0,2%	-0,9%	5,1%	
4.99€	-8,8%	0,6%	-9,1%	11,5%	-8,0%	-11,0%	
Single Serving (Portion for 1)	-9,0%	-5,0%	-3,6%	-3,6%	-3,3%	-2,3%	
Couple Serving (Portion for 2)	18,3%	12,1%	0,5%	6,2%	6,9%	-8,3%	
Family Sized Serving (Portion for >3)	-9,3%	-7,1%	3,1%	-2,6%	-3,7%	10,6%	

IGLO						
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
Cooking method	17,2%	15,0%	21,1%	13,9%	15,0%	18,8%
Meal size	19,0%	19,7%	14,1%	16,2%	16,0%	12,4%
Cooking time	20,5%	16,0%	18,3%	14,4%	15,5%	9,4%
Meal type	13,2%	16,2%	14,1%	20,7%	18,0%	13,2%
Price (per serving)	13,4%	13,5%	13,3%	15,6%	14,7%	13,0%
Ingredients/ Nutritional value	16,6%	19,6%	19,1%	19,2%	20,9%	33,3%
Sum	100%	100%	100%	100%	100%	100%

IGLO						
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
5 minutes	11,6%	8,0%	2,8%	7,2%	7,8%	0,9%
12 minutes	-1,6%	-3,2%	9,7%	1,2%	-0,7%	4,3%
20 minutes	-9,9%	-4,8%	-12,6%	-3,4%	-7,2%	-5,1%
Pan	2,1%	5,6%	2,8%	1,6%	4,1%	0,4%
Oven	4,9%	4,1%	10,5%	5,7%	6,3%	9,2%
Microwave	-7,0%	-9,7%	-13,3%	-7,3%	-10,4%	-9,6%
Comfort / Convenience Meals	0,9%	1,0%	-6,3%	1,6%	-3,3%	-7,8%
Health / Fitness Meals	9,8%	3,5%	4,0%	10,1%	5,6%	5,3%
Vegetarian / Vegan Meals	-10,7%	-4,5%	2,3%	-3,5%	-2,3%	2,5%
All-natural / organic emphasis	8,8%	10,0%	9,7%	9,3%	10,4%	5,3%
Low-calorie / light option	-0,6%	-12,4%	-6,2%	-0,3%	-4,7%	14,3%
No additives / flavor enhancers	-11,0%	-0,6%	-4,7%	-14,8%	-12,7%	-19,0%
Locally sourced / sustainable	2,7%	2,9%	1,3%	5,8%	6,9%	-0,5%
2.99€	5,2%	6,5%	10,4%	5,7%	8,7%	0,0%
3.99€	1,6%	-0,4%	-3,3%	4,3%	0,8%	6,5%
4.99€	-6,8%	-6,1%	-7,1%	-1,0%	-9,5%	-6,5%
Single Serving (Portion for 1)	4,4%	-1,4%	-5,8%	0,8%	1,9%	5,5%
Couple Serving (Portion for 2)	5,0%	15,3%	4,6%	5,2%	8,1%	1,4%
Family Sized Serving (Portion for >3)	-9,4%	-13,9%	1,2%	-6,0%	-10,0%	-6,9%

JAI		Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
<b>ATTRIBUTE / AGE</b>							
<b>Cooking method</b>		14,0%	20,9%	24,3%	16,9%	16,9%	16,5%
<b>Meal size</b>		18,2%	13,3%	14,8%	16,0%	15,9%	20,8%
<b>Cooking time</b>		15,2%	17,7%	19,0%	16,5%	16,7%	4,6%
<b>Meal type</b>		12,0%	12,7%	14,2%	14,0%	14,3%	15,1%
<b>Price (per serving)</b>		24,4%	17,2%	8,9%	17,5%	17,2%	17,8%
<b>Ingredients/ Nutritional value</b>		16,2%	18,2%	18,8%	19,1%	18,9%	25,2%
<b>Sum</b>		100%	100%	100%	100%	100%	100%

JAI		Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
<b>ATTRIBUTE / AGE</b>							
5 minutes		8,9%	9,9%	9,6%	12,7%	10,8%	2,5%
12 minutes		0,8%	-5,1%	3,2%	1,9%	-1,0%	-0,4%
20 minutes		-9,8%	-6,8%	12,9%	-0,8%	-9,8%	-2,1%
Pan		4,6%	6,4%	1,6%	3,6%	5,2%	-6,4%
Oven		-1,5%	2,0%	14,0%	2,3%	1,8%	-3,7%
Microwave		-3,2%	-6,5%	15,6%	1,3%	-7,0%	10,1%
Comfort / Convenience Meals		-6,8%	-6,2%	-6,9%	9,3%	-9,4%	-7,6%
Health / Fitness Meals		4,3%	0,0%	-3,5%	7,1%	2,8%	7,5%
Vegetarian / Vegan Meals		2,5%	7,1%	10,3%	2,2%	6,6%	0,1%
All-natural / organic emphasis		5,9%	6,6%	3,5%	7,6%	6,7%	6,7%
Low-calorie / light option		3,7%	-1,0%	-1,5%	2,9%	-0,2%	-3,2%
No additives / flavor enhancers		-7,3%	-6,7%	11,0%	9,5%	-9,5%	10,9%
Locally sourced / sustainable		-2,2%	3,1%	9,0%	1,0%	3,0%	-14,3%
2.99€		14,4%	13,4%	3,7%	6,1%	13,9%	9,7%
3.99€		-1,1%	-2,5%	-0,5%	-4,0%	-2,9%	-1,5%
4.99€		-13,3%	-16,9%	-3,2%	-2,1%	-11,0%	-8,2%
Single Serving (Portion for 1)		-0,2%	3,7%	-1,6%	1,1%	1,4%	2,5%
Couple Serving (Portion for 2)		10,8%	4,9%	-0,6%	5,1%	4,5%	9,1%
Family Sized Serving (Portion for >3)		-10,6%	-6,6%	2,2%	3,9%	5,9%	-11,7%

GUT & GÜNSTIG						
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
Cooking method	23,8%	27,0%	34,6%	22,7%	25,8%	13,5%
Meal size	24,5%	15,9%	9,2%	18,7%	17,0%	22,7%
Cooking time	15,6%	19,1%	14,4%	16,0%	16,7%	16,5%
Meal type	8,4%	13,8%	25,1%	18,3%	18,6%	18,5%
Price (per serving)	12,6%	10,7%	5,7%	10,7%	8,5%	20,2%
Ingredients/ Nutritional value	15,1%	13,6%	11,0%	13,7%	13,5%	8,6%
Sum	100%	100%	100%	100%	100%	100%

GUT & GÜNSTIG						
ATTRIBUTE / AGE	Mittlere Reife	Abitur	Ausbildung	Bachelor	Master	Prefer not to say
5 minutes	7,2%	5,5%	9,2%	12,9%	10,5%	4,3%
12 minutes	9,7%	6,9%	0,2%	0,2%	1,3%	-10,4%
20 minutes	-16,9%	-12,4%	-9,4%	-13,1%	-11,8%	6,1%
Pan	18,4%	17,9%	10,3%	11,3%	14,2%	3,9%
Oven	-5,4%	0,8%	12,2%	4,3%	7,0%	-8,7%
Microwave	-13,0%	-18,7%	-22,5%	-15,6%	-21,2%	4,8%
Comfort / Convenience Meals	5,3%	5,7%	0,3%	2,4%	2,3%	-6,9%
Health / Fitness Meals	-4,4%	-5,2%	-15,1%	-2,9%	-7,7%	11,7%
Vegetarian / Vegan Meals	-0,9%	2,5%	14,8%	0,5%	5,4%	-4,8%
All-natural / organic emphasis	2,1%	3,8%	4,8%	2,2%	0,9%	5,1%
Low-calorie / light option	-5,2%	-4,6%	-1,8%	-2,6%	-5,2%	-3,0%
No additives / flavor enhancers	-3,1%	-4,8%	-6,4%	-4,9%	0,3%	-2,9%
Locally sourced / sustainable	6,2%	5,6%	3,4%	5,3%	4,0%	0,8%
2.99€	6,4%	5,9%	3,9%	3,9%	7,5%	10,8%
3.99€	-0,1%	-1,0%	-1,6%	-3,9%	-4,4%	-3,9%
4.99€	-6,3%	-4,9%	-2,3%	-5,0%	-4,1%	-6,9%
Single Serving (Portion for 1)	4,2%	4,6%	0,2%	5,3%	5,2%	4,2%
Couple Serving (Portion for 2)	6,3%	0,7%	-2,7%	5,5%	2,9%	9,3%
Family Sized Serving (Portion for >3)	-10,5%	-5,4%	2,5%	-11,8%	-6,1%	-13,4%

## Appendix 78 – Occupation Conjoint Analysis

BRAND / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
Frosta	11,8514	16,6349	9,5912	16,3207	15,5696
Iglo	9,0038	6,1046	14,1577	16,8662	-0,9202
Gut & Günstig	-1,2452	-4,492	-6,92	-4,1592	2,0236
Jal	-18,868	-18,0127	-19,4214	-27,4063	-12,1427

FROSTA					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
Cooking method	19,5%	22,8%	19,3%	29,5%	26,0%
Meal size	19,3%	18,6%	19,9%	23,7%	19,4%
Cooking time	16,2%	16,2%	15,6%	9,6%	13,7%
Meal type	16,2%	13,7%	16,6%	11,1%	11,7%
Price (per serving)	14,0%	15,5%	13,7%	10,4%	13,4%
Ingredients/ Nutritional value	14,8%	13,1%	15,0%	15,7%	15,8%
Sum	100%	100%	100%	100%	100%

FROSTA					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
5 minutes	8,0%	7,7%	8,2%	1,1%	10,0%
12 minutes	3,9%	5,0%	2,4%	0,6%	1,9%
20 minutes	-1,9%	-2,7%	-10,6%	1,7%	-11,8%
Pan	0,5%	3,6%	-1,7%	0,7%	2,7%
Oven	0,7%	5,8%	4,3%	6,4%	15,4%
Microwave	-1,2%	-9,3%	-2,6%	-7,1%	-18,1%
Comfort / Convenience Meals	1,8%	1,5%	7,1%	3,6%	-0,1%
Health / Fitness Meals	9,0%	1,8%	8,7%	1,7%	4,8%
Vegetarian / Vegan Meals	7,2%	0,4%	-15,8%	5,3%	-4,7%
All-natural / organic emphasis	2,7%	4,8%	2,2%	5,9%	0,8%
Low-calorie / light option	4,5%	5,6%	-10,2%	3,4%	-6,5%
No additives / flavor enhancers	4,6%	4,1%	4,6%	9,7%	2,2%
Locally sourced / sustainable	6,4%	5,0%	3,4%	7,2%	3,5%
2.99€	1,3%	9,7%	7,9%	3,3%	8,8%
3.99€	0,9%	2,0%	-5,2%	1,1%	-2,0%
4.99€	-2,2%	7,7%	-2,8%	2,2%	-6,8%
Single Serving (Portion for 1)	3,3%	5,6%	-1,6%	2,3%	-5,9%
Couple Serving (Portion for 2)	4,3%	7,7%	11,8%	5,0%	3,9%
Family Sized Serving (Portion for >3)	1,0%	2,2%	-10,2%	7,3%	2,0%

IGLO					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
Cooking method	14,5%	15,8%	9,0%	20,3%	19,5%
Meal size	15,5%	15,8%	23,3%	21,5%	13,3%
Cooking time	14,9%	15,6%	17,7%	19,5%	13,3%
Meal type	20,2%	17,3%	17,1%	10,8%	16,0%
Price (per serving)	15,0%	15,2%	12,7%	11,5%	14,3%
Ingredients/ Nutritional value	20,0%	20,2%	20,3%	16,4%	23,6%
Sum	100%	100%	100%	100%	100%

IGLO					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
5 minutes	7,1%	6,6%	10,8%	11,5%	5,6%
12 minutes	1,7%	2,3%	-5,7%	7,3%	0,4%
20 minutes	-6,8%	-3,8%	-5,1%	-4,2%	-6,0%
Pan	1,7%	4,5%	4,3%	3,5%	5,9%
Oven	6,2%	8,3%	-1,4%	2,9%	9,3%
Microwave	-2,8%	-12,8%	-2,9%	6,4%	-15,2%
Comfort / Convenience Meals	-2,7%	3,2%	-3,7%	3,4%	-5,1%
Health / Fitness Meals	7,7%	6,5%	9,6%	3,8%	7,7%
Vegetarian / Vegan Meals	-4,0%	-3,3%	-5,9%	7,2%	-2,6%
All-natural / organic emphasis	9,7%	11,5%	9,8%	4,1%	9,5%
Low-calorie / light option	1,2%	-7,3%	-9,5%	-14,1%	-3,1%
No additives / flavor enhancers	-16,4%	-9,8%	-4,6%	2,8%	-12,6%
Locally sourced / sustainable	5,5%	5,6%	4,2%	7,2%	6,2%
2.99€	6,7%	11,0%	4,1%	2,8%	8,3%
3.99€	4,3%	1,5%	4,4%	-2,0%	0,3%
4.99€	-10,9%	-9,6%	-8,5%	-0,9%	-8,6%
Single Serving (Portion for 1)	2,2%	2,6%	3,7%	6,0%	-0,9%
Couple Serving (Portion for 2)	5,8%	7,2%	12,4%	14,2%	6,6%
Family Sized Serving (Portion for >3)	-4,1%	-4,7%	16,1%	-20,2%	-5,6%

JAI					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
Cooking method	15,9%	18,5%	16,4%	27,0%	23,2%
Meal size	14,6%	16,1%	20,2%	17,0%	18,3%
Cooking time	17,6%	17,7%	12,4%	11,6%	11,6%
Meal type	13,9%	13,7%	18,0%	12,0%	15,2%
Price (per serving)	18,6%	15,0%	16,5%	16,3%	15,5%
Ingredients/ Nutritional value	19,5%	19,1%	16,6%	16,2%	16,3%
Sum	100%	100%	100%	100%	100%

JAI					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
5 minutes	11,4%	11,7%	8,5%	4,9%	9,4%
12 minutes	-0,1%	-0,2%	-5,6%	2,9%	-4,2%
20 minutes	-11,3%	-11,5%	-3,0%	2,0%	-5,2%
Pan	3,7%	4,5%	2,3%	8,1%	1,9%
Oven	2,4%	8,0%	-7,8%	0,3%	12,3%
Microwave	-1,3%	-12,5%	5,5%	-8,4%	-14,2%
Comfort / Convenience Meals	-8,8%	-8,8%	-8,6%	-7,3%	-9,6%
Health / Fitness Meals	5,8%	-0,7%	9,1%	5,1%	-1,9%
Vegetarian / Vegan Meals	2,9%	9,5%	-0,5%	2,2%	11,5%
All-natural / organic emphasis	7,1%	6,0%	7,4%	4,9%	5,5%
Low-calorie / light option	2,9%	-1,2%	-2,1%	2,0%	-5,9%
No additives / flavor enhancers	-9,9%	-11,2%	1,1%	-11,6%	4,4%
Locally sourced / sustainable	0,0%	6,4%	-6,4%	4,7%	-3,9%
2.99€	15,3%	10,7%	12,1%	13,0%	10,9%
3.99€	2,4%	-3,4%	-3,4%	3,8%	0,4%
4.99€	-12,9%	-7,3%	-8,8%	9,2%	-11,3%
Single Serving (Portion for 1)	0,5%	0,7%	-1,3%	5,9%	2,3%
Couple Serving (Portion for 2)	5,9%	0,7%	10,7%	9,4%	-0,3%
Family Sized Serving (Portion for >3)	-5,4%	-1,5%	-9,4%	-15,4%	-2,0%

GUT & GÜNSTIG					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
Cooking method	22,6%	27,1%	23,8%	37,1%	28,9%
Meal size	18,4%	15,1%	19,6%	19,7%	13,9%
Cooking time	16,3%	17,2%	16,2%	12,8%	16,3%
Meal type	18,5%	18,6%	16,5%	16,0%	18,0%
Price (per serving)	9,4%	9,7%	11,4%	5,2%	11,5%
Ingredients/ Nutritional value	14,8%	12,4%	12,6%	9,3%	11,4%
Sum	100%	100%	100%	100%	100%

GUT & GÜNSTIG					
ATTRIBUTE / AGE	Student	Employed	Self-Employed	Retired	Prefer not to say
5 minutes	12,5%	10,2%	10,2%	2,9%	10,1%
12 minutes	-0,5%	2,9%	2,0%	5,6%	0,8%
20 minutes	-12,0%	-13,1%	-12,2%	-6,5%	-10,9%
Pan	12,5%	13,9%	15,8%	13,7%	17,5%
Oven	3,4%	8,3%	-2,4%	10,0%	5,0%
Microwave	-15,8%	-22,2%	-13,3%	-23,7%	-22,5%
Comfort / Convenience Meals	1,7%	2,4%	1,7%	6,8%	3,9%
Health / Fitness Meals	-3,5%	-11,4%	-3,0%	-2,3%	-11,1%
Vegetarian / Vegan Meals	1,8%	8,9%	1,3%	-6,5%	7,2%
All-natural / organic emphasis	5,1%	4,0%	6,4%	2,9%	7,0%
Low-calorie / light option	-1,1%	1,2%	-2,1%	1,0%	-4,1%
No additives / flavor enhancers	5,4%	6,2%	1,1%	5,6%	0,4%
Locally sourced / sustainable	2,4%	4,4%	-5,4%	1,7%	-3,3%
2.99€	6,3%	7,2%	6,7%	3,3%	5,5%
3.99€	-1,9%	2,3%	-0,6%	-1,1%	0,4%
4.99€	-4,4%	3,9%	-6,1%	-2,2%	-5,9%
Single Serving (Portion for 1)	5,0%	3,7%	7,2%	7,8%	1,1%
Couple Serving (Portion for 2)	6,7%	1,0%	6,8%	6,7%	-0,7%
Family Sized Serving (Portion for >3)	-11,7%	2,7%	-14,0%	-16,5%	-0,5%

## Appendix 79 – Living Arrangement Conjoint Analysis

BRAND / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
Frosta	10,4859	12,1386	14,8514	22,0658
Iglo	8,8272	8,2803	9,0912	3,9446
Gut & Günstig	-2,6531	0,0922	-4,1019	-7,9941
Ja!	-16,3254	-19,7075	-19,5815	-21,3892

FROSTA				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
Cooking method	21,1%	21,9%	21,4%	21,5%
Meal size	17,6%	19,3%	19,4%	22,6%
Cooking time	15,4%	14,3%	16,6%	19,2%
Meal type	14,4%	16,8%	14,2%	10,0%
Price (per serving)	16,7%	13,2%	13,7%	15,3%
Ingredients/ Nutritional value	14,7%	14,5%	14,8%	11,3%
Sum	100%	100%	100%	100%

FROSTA				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
5 minutes	8,4%	6,7%	6,7%	9,4%
12 minutes	3,2%	2,5%	3,7%	9,3%
20 minutes	-11,6%	-9,1%	-10,4%	-18,7%
Pan	1,9%	0,6%	2,3%	3,6%
Oven	13,1%	12,2%	15,4%	7,8%
Microwave	-15,0%	-12,8%	-17,7%	-11,4%
Comfort / Convenience Meals	-0,4%	-0,9%	-0,1%	-1,7%
Health / Fitness Meals	4,4%	9,3%	4,0%	-2,0%
Vegetarian / Vegan Meals	-4,0%	-8,4%	-3,9%	3,7%
All-natural / organic emphasis	4,6%	1,9%	4,4%	4,8%
Low-calorie / light option	-8,2%	-4,1%	-6,8%	-0,8%
No additives / flavor enhancers	-3,0%	-3,8%	-3,8%	-5,0%
Locally sourced / sustainable	6,6%	6,0%	6,1%	1,0%
2.99€	10,7%	10,2%	8,3%	9,3%
3.99€	-0,1%	0,2%	-2,6%	-1,8%
4.99€	-10,6%	-10,4%	-5,8%	-7,6%
Single Serving (Portion for 1)	-2,9%	-1,4%	-3,2%	-13,3%
Couple Serving (Portion for 2)	4,7%	6,2%	9,1%	6,4%
Family Sized Serving (Portion for >3)	-1,7%	-4,8%	-5,9%	7,0%

IGLO				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
Cooking method	15,4%	15,0%	15,6%	14,5%
Meal size	16,3%	15,5%	17,2%	17,1%
Cooking time	16,3%	14,4%	15,8%	17,2%
Meal type	16,2%	20,0%	18,3%	16,2%
Price (per serving)	14,5%	14,8%	14,8%	14,7%
Ingredients/ Nutritional value	21,4%	20,3%	18,4%	20,4%
Sum	100%	100%	100%	100%

IGLO				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
5 minutes	7,4%	7,4%	7,7%	5,8%
12 minutes	2,3%	-0,1%	0,0%	3,6%
20 minutes	-9,7%	-7,3%	-7,7%	-9,4%
Pan	4,2%	1,5%	5,4%	2,6%
Oven	6,2%	6,9%	6,3%	5,7%
Microwave	-10,4%	-8,4%	-11,6%	-8,3%
Comfort / Convenience Meals	-4,0%	-1,6%	-3,3%	-2,6%
Health / Fitness Meals	6,1%	8,2%	5,4%	8,5%
Vegetarian / Vegan Meals	-2,1%	-6,6%	-2,1%	-5,9%
All-natural / organic emphasis	9,8%	9,1%	10,5%	12,4%
Low-calorie / light option	-3,7%	-0,1%	-9,6%	-2,6%
No additives / flavor enhancers	-11,8%	-14,9%	-7,3%	-12,4%
Locally sourced / sustainable	5,7%	5,9%	6,4%	2,7%
2.99€	8,0%	6,7%	8,8%	10,1%
3.99€	0,4%	3,7%	-0,1%	0,8%
4.99€	-8,4%	-10,3%	-8,7%	-11,0%
Single Serving (Portion for 1)	1,2%	2,9%	0,2%	-6,5%
Couple Serving (Portion for 2)	8,6%	5,7%	10,3%	4,1%
Family Sized Serving (Portion for >3)	-9,8%	-8,5%	-10,4%	2,4%

JAI				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
Cooking method	19,9%	16,1%	17,9%	19,3%
Meal size	15,7%	15,7%	15,3%	17,0%
Cooking time	16,6%	16,7%	16,2%	18,9%
Meal type	13,7%	13,9%	14,3%	14,2%
Price (per serving)	16,3%	18,6%	16,2%	13,7%
Ingredients/ Nutritional value	17,9%	19,2%	20,1%	16,9%
Sum	100%	100%	100%	100%

JAI				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
5 minutes	10,8%	10,9%	10,8%	12,1%
12 minutes	-0,1%	-1,9%	-1,1%	1,0%
20 minutes	-10,7%	-9,0%	-9,6%	-13,1%
Pan	4,0%	4,6%	5,1%	1,6%
Oven	2,3%	-2,5%	5,0%	7,3%
Microwave	-6,3%	-2,1%	-10,0%	-8,9%
Comfort / Convenience Meals	-9,1%	-8,8%	-9,5%	-7,2%
Health / Fitness Meals	2,8%	7,0%	1,8%	-3,1%
Vegetarian /Vegan Meals	6,3%	1,9%	7,7%	10,3%
All-natural /organic emphasis	6,7%	6,6%	6,4%	6,5%
Low-calorie / light option	-1,1%	3,7%	-1,4%	-1,6%
No additives / flavor enhancers	-8,7%	-9,9%	-9,2%	-8,5%
Locally sourced / sustainable	3,1%	-0,5%	4,1%	3,6%
2.99€	13,3%	15,8%	12,1%	8,3%
3.99€	-1,7%	-3,7%	-3,4%	-1,1%
4.99€	-11,6%	-12,1%	-8,7%	-7,2%
Single Serving (Portion for 1)	0,5%	0,6%	1,2%	-1,9%
Couple Serving (Portion for 2)	6,0%	6,2%	4,9%	-4,4%
Family Sized Serving (Portion for >3)	-6,6%	-6,8%	-6,1%	6,3%

GUT & GÜNSTIG				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
Cooking method	27,4%	24,1%	25,9%	24,7%
Meal size	15,3%	19,2%	16,5%	15,0%
Cooking time	15,3%	15,6%	17,3%	19,5%
Meal type	17,2%	17,9%	19,7%	18,3%
Price (per serving)	9,4%	9,7%	9,4%	8,9%
Ingredients/ Nutritional value	15,4%	13,6%	11,2%	13,5%
Sum	100%	100%	100%	100%

GUT & GÜNSTIG				
ATTRIBUTE / AGE	Single Household	Living with Flatmates	Living with a Partner	Living with a Family
5 minutes	9,6%	11,8%	9,3%	10,6%
12 minutes	1,4%	-0,6%	2,8%	4,7%
20 minutes	-11,0%	-11,2%	-12,1%	-15,3%
Pan	15,0%	11,2%	15,4%	12,5%
Oven	6,6%	6,5%	7,2%	-1,5%
Microwave	-21,7%	-17,6%	-22,6%	-11,0%
Comfort / Convenience Meals	2,8%	3,1%	2,4%	0,4%
Health / Fitness Meals	-8,9%	-1,0%	-9,7%	-13,0%
Vegetarian / Vegan Meals	6,1%	-2,1%	7,2%	12,6%
All-natural / organic emphasis	5,5%	6,7%	5,5%	4,1%
Low-calorie / light option	-1,3%	0,4%	-2,4%	-1,2%
No additives / flavor enhancers	-7,4%	-6,9%	-5,2%	-6,2%
Locally sourced / sustainable	3,2%	-0,2%	2,1%	3,3%
2.99€	8,1%	7,4%	5,4%	6,2%
3.99€	-1,8%	-3,3%	-1,7%	-0,1%
4.99€	-6,3%	-4,1%	-3,7%	-6,1%
Single Serving (Portion for 1)	3,8%	5,9%	5,4%	0,7%
Couple Serving (Portion for 2)	2,0%	8,3%	1,7%	-3,8%
Family Sized Serving (Portion for >3)	-5,8%	-14,2%	-7,1%	3,1%

## Appendix 80 – Frozen RTE Meal Consumption Conjoint Analysis

BRAND / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never
Frosta	-0,4496	19,9239	18,9396	10,026	14,1393	8,2744
Iglo	9,9991	2,7228	8,7459	10,7652	5,4712	10,7783
Gut & Günstig	6,0511	2,3378	-6,4255	-4,5331	-6,0201	-1,3065
Ja!	-10,7312	-22,8428	-24,9175	-17,7773	-15,3483	-15,5822

FROSTA							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
Cooking method	23,0%	25,4%	18,2%	21,2%	19,8%	24,7%	
Meal size	15,2%	16,6%	20,9%	18,7%	19,6%	21,6%	
Cooking time	16,8%	14,4%	17,4%	16,3%	15,8%	13,2%	
Meal type	14,1%	17,9%	15,7%	12,7%	16,5%	11,4%	
Price (per serving)	14,9%	12,7%	14,2%	15,6%	13,0%	15,9%	
Ingredients/ Nutritional value	16,1%	13,1%	13,6%	15,4%	15,3%	13,2%	
Sum	100%	100%	100%	100%	100%	100%	

FROSTA							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
5 minutes	9,8%	3,9%	6,9%	9,7%	10,6%	6,3%	
12 minutes	-1,8%	5,3%	5,5%	2,6%	3,7%	4,0%	
20 minutes	-8,0%	-9,2%	-12,5%	-12,3%	-14,3%	10,3%	
Pan	0,3%	1,5%	0,7%	1,5%	4,0%	1,8%	
Oven	13,5%	15,6%	11,1%	10,8%	10,6%	15,2%	
Microwave	-13,8%	17,1%	-11,8%	-12,3%	-14,6%	16,9%	
Comfort / Convenience Meals	4,4%	0,4%	-0,3%	-5,0%	-2,9%	1,3%	
Health / Fitness Meals	2,1%	8,3%	8,4%	2,1%	1,5%	6,3%	
Vegetarian / Vegan Meals	-6,5%	-8,6%	-8,1%	2,9%	1,3%	-7,6%	
All-natural / organic emphasis	4,0%	2,2%	2,6%	3,3%	5,7%	4,5%	
Low-calorie / light option	-7,2%	-5,8%	-1,5%	-7,1%	-7,6%	-4,7%	
No additives / flavor enhancers	-2,0%	-1,1%	-4,1%	-3,2%	-6,4%	-5,5%	
Locally sourced / sustainable	5,2%	4,8%	3,0%	7,0%	8,3%	5,7%	
2.99€	11,2%	6,6%	10,0%	12,7%	9,8%	9,6%	
3.99€	-4,4%	0,5%	-0,4%	0,0%	-4,8%	0,9%	
4.99€	-6,8%	-7,1%	-9,6%	-12,7%	-5,0%	10,5%	
Single Serving (Portion for 1)	0,0%	-4,6%	-5,6%	-3,7%	-4,5%	-2,2%	
Couple Serving (Portion for 2)	6,8%	7,1%	9,0%	3,8%	9,6%	4,0%	
Family Sized Serving (Portion for >3)	-6,8%	-2,5%	-3,5%	-0,1%	-5,2%	-1,9%	

IGLO							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
Cooking method	17,5%	15,7%	15,6%	14,0%	13,7%	16,1%	
Meal size	16,5%	16,1%	17,3%	13,6%	15,9%	18,0%	
Cooking time	16,7%	14,8%	15,7%	16,2%	15,0%	15,3%	
Meal type	15,1%	17,6%	18,6%	20,6%	18,6%	17,1%	
Price (per serving)	16,2%	15,8%	13,8%	13,5%	16,2%	14,0%	
Ingredients/ Nutritional value	18,0%	20,0%	19,1%	22,1%	20,7%	19,4%	
Sum	100%	100%	100%	100%	100%	100%	

IGLO							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
5 minutes	8,9%	7,0%	8,8%	4,3%	7,8%	6,1%	
12 minutes	-0,4%	-0,5%	-1,0%	5,4%	0,5%	1,8%	
20 minutes	-8,5%	-6,5%	-7,8%	-9,7%	-8,3%	-7,9%	
Pan	1,1%	3,3%	2,4%	2,7%	4,9%	3,1%	
Oven	7,5%	7,8%	4,1%	7,5%	4,6%	7,9%	
Microwave	-8,6%	-11,1%	-6,6%	-10,1%	-9,5%	-10,9%	
Comfort / Convenience Meals	-2,3%	-0,9%	0,3%	-9,5%	-4,9%	-0,2%	
Health / Fitness Meals	4,8%	10,1%	9,6%	4,6%	2,9%	7,4%	
Vegetarian / Vegan Meals	-2,6%	-9,2%	-9,8%	4,9%	2,0%	-7,2%	
All-natural / organic emphasis	7,3%	8,0%	10,3%	13,2%	12,1%	6,9%	
Low-calorie / light option	-4,8%	-3,6%	-0,4%	-1,2%	-5,8%	-5,6%	
No additives / flavor enhancers	-7,5%	-10,8%	-13,1%	-16,4%	-10,4%	-11,0%	
Locally sourced / sustainable	5,1%	6,3%	3,2%	4,4%	4,2%	9,7%	
2.99€	8,7%	7,0%	6,3%	8,4%	9,1%	8,1%	
3.99€	1,3%	3,2%	2,1%	1,4%	-0,5%	2,1%	
4.99€	-10,0%	-10,3%	-8,3%	-9,8%	-8,6%	-10,2%	
Single Serving (Portion for 1)	3,6%	0,0%	2,4%	0,2%	0,4%	-1,3%	
Couple Serving (Portion for 2)	11,1%	6,1%	6,5%	2,6%	10,5%	7,5%	
Family Sized Serving (Portion for >3)	-14,6%	-6,1%	-8,9%	-2,8%	-11,0%	-6,2%	

JAI							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
Cooking method	20,1%	19,7%	14,3%	16,3%	19,4%	19,7%	
Meal size	14,3%	15,9%	16,8%	13,5%	13,3%	19,6%	
Cooking time	14,9%	18,3%	16,0%	17,5%	18,7%	14,4%	
Meal type	14,3%	13,6%	14,1%	15,0%	13,1%	14,0%	
Price (per serving)	15,9%	16,1%	19,4%	17,6%	16,0%	14,6%	
Ingredients/ Nutritional value	20,5%	16,4%	19,4%	20,1%	19,5%	17,7%	
Sum	100%	100%	100%	100%	100%	100%	

JAI							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
5 minutes	9,0%	15,3%	11,8%	11,8%	9,1%	11,4%	
12 minutes	-1,0%	-8,3%	-2,9%	2,5%	3,3%	-1,7%	
20 minutes	-8,0%	-7,0%	-8,8%	-14,3%	-12,5%	-9,7%	
Pan	4,3%	5,0%	4,5%	2,4%	3,9%	6,2%	
Oven	-2,1%	5,1%	-2,8%	1,2%	3,5%	6,5%	
Microwave	-2,2%	-10,2%	-1,7%	-3,6%	-7,5%	-12,7%	
Comfort / Convenience Meals	-8,7%	-10,0%	-8,7%	-10,2%	-8,4%	-9,3%	
Health / Fitness Meals	5,5%	5,4%	7,0%	2,8%	-1,4%	3,2%	
Vegetarian / Vegan Meals	3,2%	4,6%	1,6%	7,4%	9,8%	6,0%	
All-natural / organic emphasis	5,8%	5,5%	8,2%	9,1%	6,0%	5,0%	
Low-calorie / light option	1,3%	4,1%	4,1%	-3,9%	-2,7%	1,8%	
No additives / flavor enhancers	-8,4%	-8,4%	-9,9%	-9,0%	-8,9%	-12,1%	
Locally sourced / sustainable	1,2%	-1,2%	-2,4%	3,8%	5,6%	5,3%	
2.99€	13,3%	15,4%	16,1%	13,9%	11,0%	12,7%	
3.99€	-2,4%	-4,5%	-3,8%	-4,3%	-0,7%	-2,3%	
4.99€	-10,9%	-11,0%	-12,4%	-9,6%	-10,3%	-10,4%	
Single Serving (Portion for 1)	1,9%	0,7%	0,7%	-1,9%	0,3%	2,0%	
Couple Serving (Portion for 2)	11,1%	2,4%	4,6%	5,3%	6,2%	0,0%	
Family Sized Serving (Portion for >3)	-13,0%	-3,1%	-5,3%	-3,3%	-6,5%	-2,0%	

GUT & GÜNSTIG							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
Cooking method	27,0%	28,5%	23,4%	23,6%	26,7%	25,1%	
Meal size	15,2%	15,8%	19,1%	19,9%	13,4%	17,7%	
Cooking time	18,2%	16,5%	17,1%	13,8%	16,3%	17,5%	
Meal type	19,5%	18,6%	17,3%	20,4%	18,1%	16,8%	
Price (per serving)	9,2%	6,5%	10,4%	8,5%	11,2%	9,7%	
Ingredients/ Nutritional value	11,0%	14,0%	12,7%	13,7%	14,3%	13,3%	
Sum	100%	100%	100%	100%	100%	100%	

GUT & GÜNSTIG							
ATTRIBUTE / AGE	2-4 times per week	Once a week	Every two weeks	Once a month	Every few months	Almost never	
5 minutes	7,3%	13,7%	11,7%	10,7%	7,3%	9,7%	
12 minutes	6,6%	3,8%	1,8%	-1,9%	4,2%	3,6%	
20 minutes	-13,9%	9,9%	-13,5%	-8,8%	-11,5%	-13,3%	
Pan	10,5%	1,2%	13,5%	12,5%	16,3%	11,9%	
Oven	12,5%	9,8%	0,1%	3,5%	2,0%	11,9%	
Microwave	-23,0%	-21,1%	-13,6%	-16,0%	-18,3%	-23,8%	
Comfort / Convenience Meals	4,3%	4,9%	3,9%	-4,5%	0,4%	5,5%	
Health / Fitness Meals	-4,4%	1,8%	-3,6%	-9,9%	-14,0%	3,7%	
Vegetarian / Vegan Meals	0,1%	3,1%	-0,3%	14,4%	13,6%	2,8%	
All-natural / organic emphasis	4,3%	5,2%	5,3%	5,4%	4,0%	4,0%	
Low-calorie / light option	-0,9%	3,7%	4,0%	-1,8%	-1,2%	1,8%	
No additives / flavor enhancers	-5,5%	7,8%	-6,8%	-4,1%	-5,9%	-7,1%	
Locally sourced / sustainable	2,1%	1,1%	-2,5%	2,5%	3,1%	3,3%	
2.99€	7,3%	10,7%	11,6%	12,0%	2,3%	9,6%	
3.99€	-2,1%	4,4%	-2,8%	-3,9%	-4,0%	2,1%	
4.99€	-5,1%	6,3%	-8,8%	-8,1%	-6,3%	-7,5%	
Single Serving (Portion for 1)	3,1%	3,1%	6,0%	5,6%	3,5%	4,6%	
Couple Serving (Portion for 2)	7,5%	2,4%	6,9%	0,8%	-0,3%	4,5%	
Family Sized Serving (Portion for >3)	-10,6%	5,5%	-12,8%	-6,4%	-3,2%	9,1%	

## Appendix 81 – Pivot Age x Frequency

		Q6: Frozen ready-to-eat meal consumption frequency						
		2-4 times per week	Almost never	Every few months	Every two weeks	Once a month	Once a week	Totals
Q7: Age Group	18-27 (Gen Z)	2	16	12	19	17	11	77
	28-46 (Gen Y)	3	1	5	3		4	16
	47-58 (Gen X)	1	2	2	4	3	2	14
	>59 (baby boomers)	3	1	5	6	1	2	18
	Totals	9	20	24	32	21	19	125

## Appendix 82 – ANOVA Results Comparing Different Demographic Groups on Their Consumption Frequency of Ready-To-Eat Meals

Group	df	F	p	Levels	Mean	SD	Tukey Test
<b>Age</b>	3,121	1.92	0.129	Gen Z	4.00	1.45	Not sign.
				Gen Y	3.19	1.72	
				Gen X	3.64	1.50	
				Baby Boomers	3.33	1.57	
<b>Education</b> (without 'prefer not to say')	4, 119	2.13	0.081	Mittlere Reife	3.75	1.50	Not sign.
				Abitur	4.09	1.64	
				Apprenticeship	2.50	1.27	
				Bachelors	3.95	1.36	
				Masters	3.83	1.57	
<b>Occupation</b> (without 'prefer not to say')	2,117	2.63	0.076	Student	3.90	1.39	Not sign.
				Employed	3.66	1.57	
				Not Employed	2.57	1.40	
<b>Living Arrangements</b>	3, 120	3.15	0.028	<b>Family</b>	<b>4.46</b>	<b>1.39</b>	<b>0.043</b>
				<b>Single</b>	<b>3.70</b>	<b>1.47</b>	
				Partner	4.02	1.38	
				Flatmate	3.14	1.67	

*\*Note: the variable on the left displays a significant difference in mean values with the variables on the right and vice versa. The variables listed on the right do not display a significant difference in mean values with other variables on the right.*

### Appendix 83 – Pivot Gender x Frequency

		Q6: Frozen ready-to-eat meal consumption frequency						Totals
		2-4 times	Almost	Every few	Every two	Once a	Once a	
Q8: Gender	Female	2	9	15	17	16	9	68
	Male	7	12	9	14	5	10	57
	Totals	9	21	24	31	21	19	125

### Appendix 84 – Independent T-Test Results Comparing Two Genders in Their Consumption Frequency of Ready-To-Eat Meals

Group	n	Mean	SD	t	df	p
<b>Female</b>	68	3.88	1.34	0.79	103.74	0.429
<b>Male</b>	56	3.77	1.70			

## Appendix 85 – Pivot Education x Frequency

		Q6: Frozen ready-to-eat meal consumption frequency						Totals
		2-4 times per week	Almost never	Every few months	Every two weeks	Once a month	Once a week	
Q9: Educational Level	"Mittlere Reife" (GCSEs)			2	1		1	4
	"Abitur" (A-Level)	1	2	4	2	1	1	11
	"Ausbildung" (Apprenticeship)	2		1	2	1	4	10
	Bachelor	1	7	8	11	10	5	42
	Master	4	12	9	15	9	8	57
	Prefer not to say	1						1
	Total	9	21	24	31	21	19	125

## Appendix 86 – Pivot Occupation x Frequency

		Q6: Frozen ready-to-eat meal consumption frequency						Totals
		2-4 times per week	Almost never	Every few months	Every two weeks	Once a month	Once a week	
Q10: Occupation	Student	1	10	11	14	14	10	60
	Employed	5	8	10	10	5	8	46
	Self-Employed			1	4	2		7
	Retired	2		1	3		1	7
	Prefer not to say	1	3	1				5
	Total	9	21	24	31	21	19	125

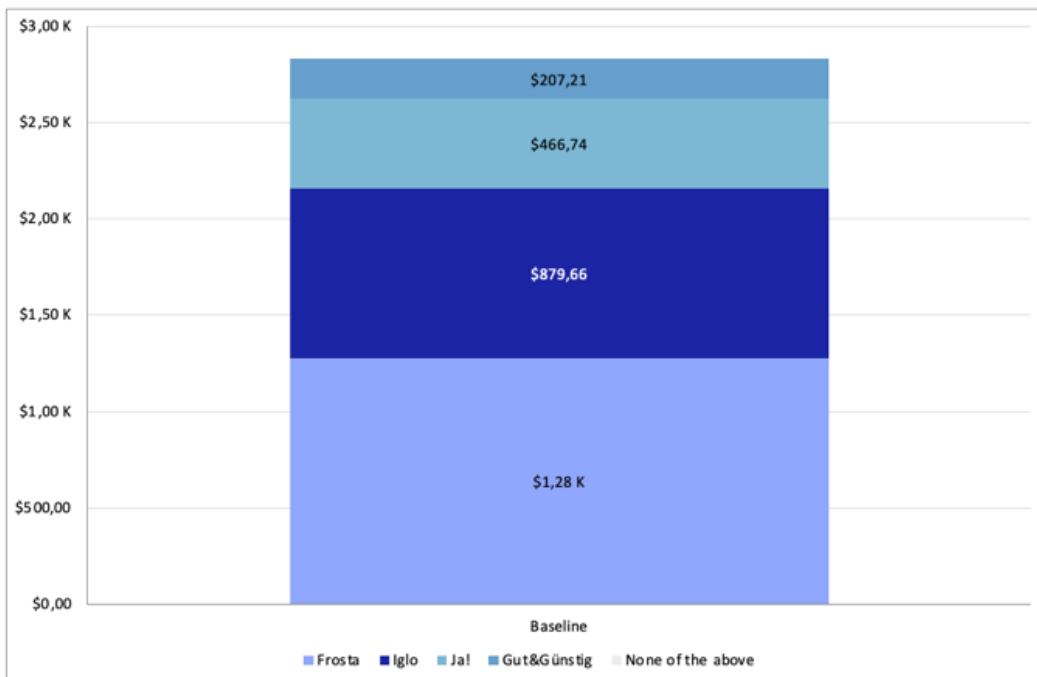
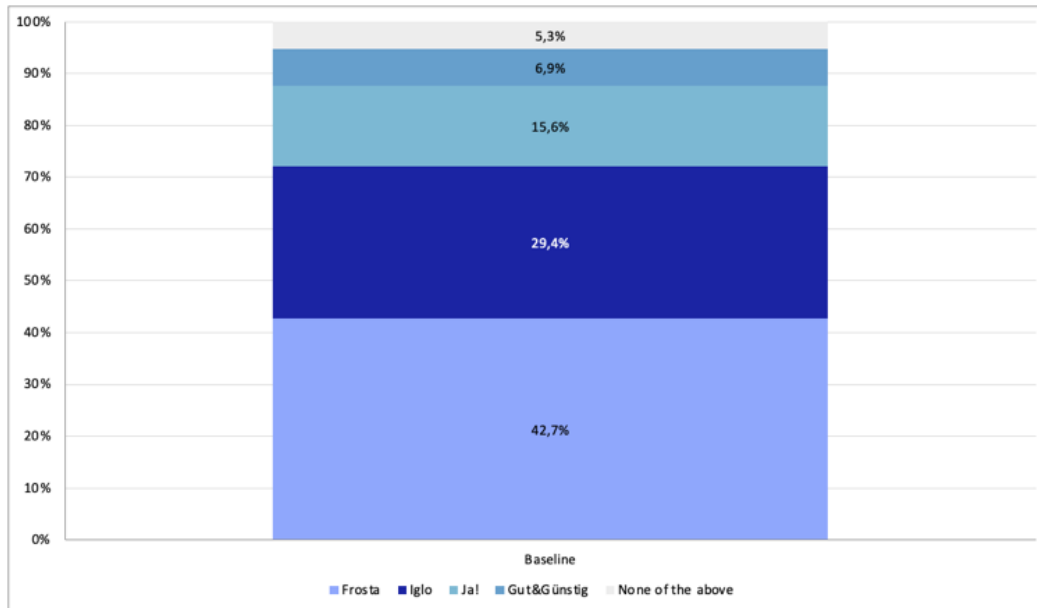
## Appendix 87 – Pivot Living Arrangement x Frequency

		Q6: Frozen ready-to-eat meal consumption frequency						Totals
		2-4 times per week	Almost never	Every few months	Every two weeks	Once a month	Once a week	
Q11: Living Arrangement	Single Household	6	3	4	6	4	5	28
	Living with a Partner	2	4	8	10	4	5	33
	Living with Flatmates		10	9	12	11	8	50
	Living with a Family	1	4	3	3	2	1	14
	Total	9	21	24	31	21	19	125

## Appendix 88 – Simulation Baseline

### BASELINE

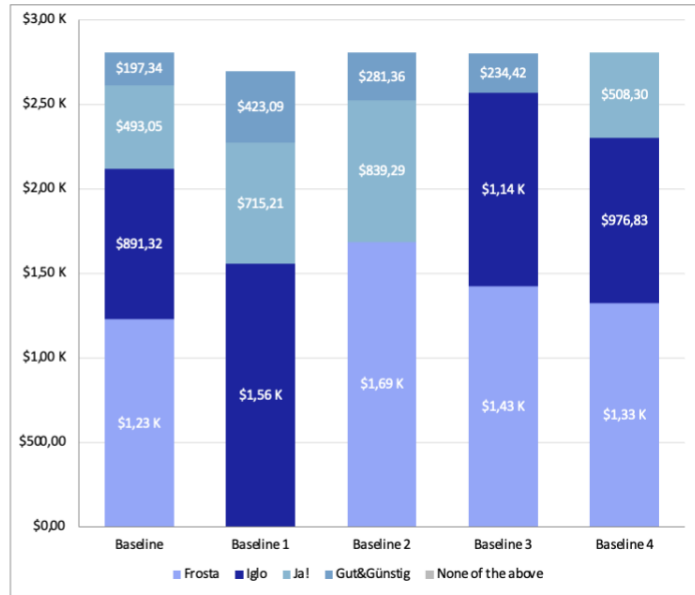
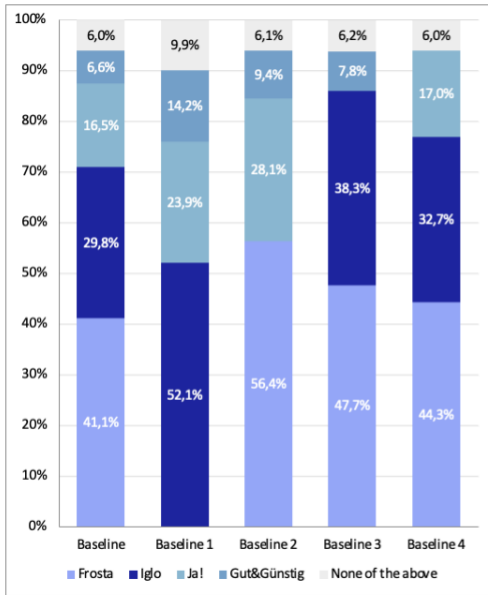
	Price	Preference share	Revenue projections
	Baseline	Baseline	(assuming 1,000 units offered) Baseline
Frosta	\$2,99	42,7%	1.276,73
Iglo	\$2,99	29,4%	879,66
Ja!	\$2,99	15,6%	466,74
Gut&Günstig	\$2,99	6,9%	207,21
None of the above	\$0,00	5,3%	0



## Appendix 89 - Simulation: Sensitivity to Brand Preferences

### BRAND IMPORTANCE

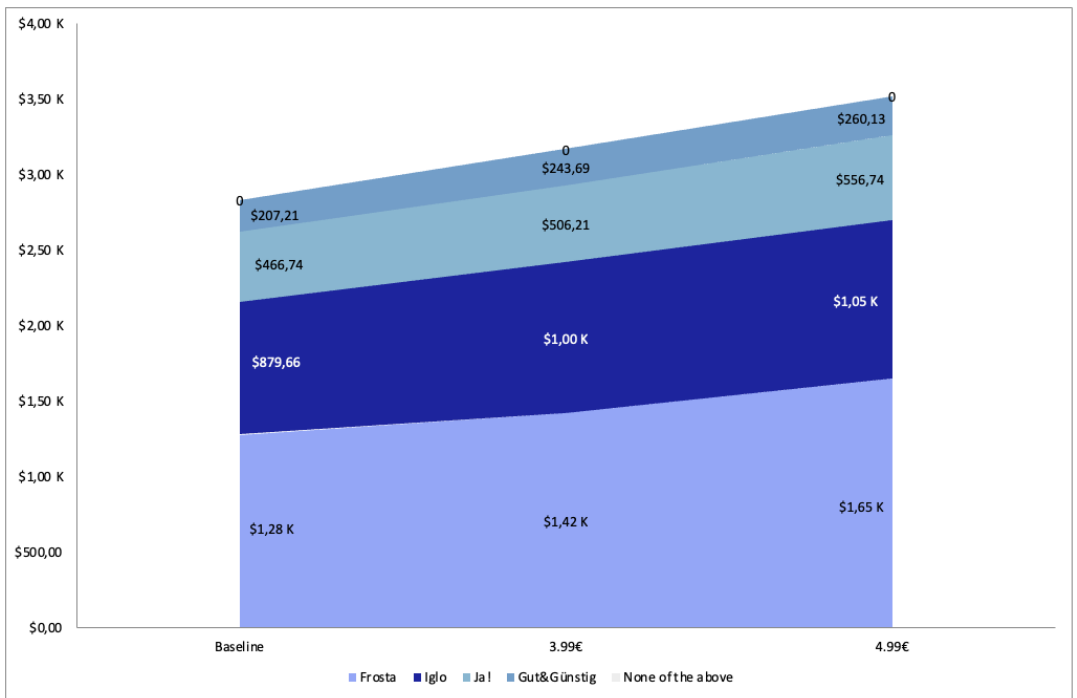
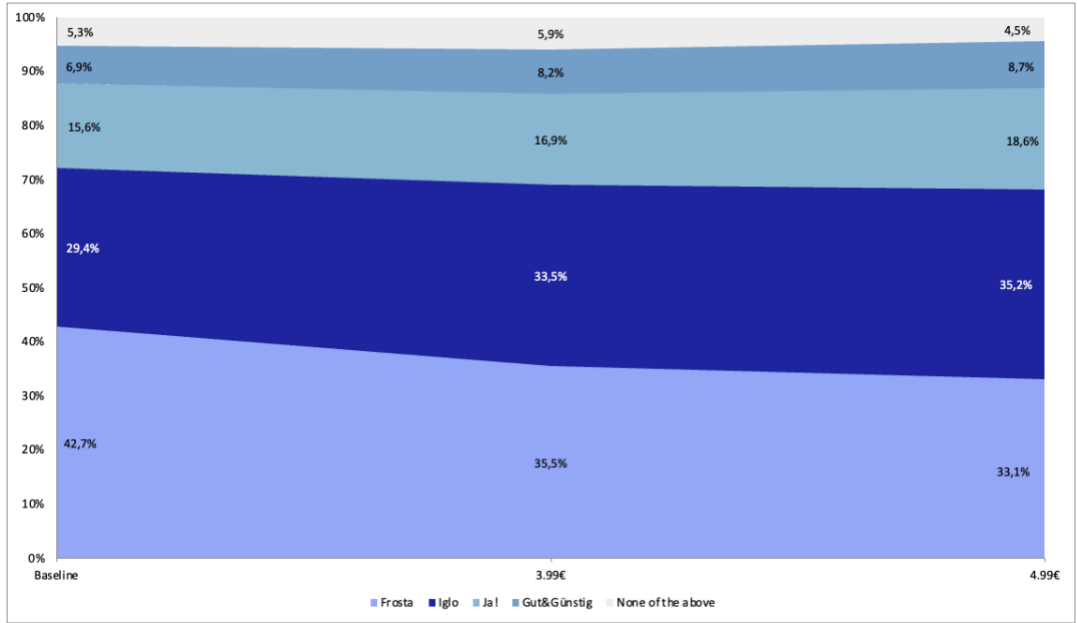
	Baseline			3.99€					Baseline	No Frosta				
	Baseline	3.99€	4.99€	Baseline	No Frosta	No Iglo	No Jal	No Gut & Günstig		Baseline	No Frosta	No Iglo	No Jal	No Gut & Günstig
Frosta	\$2,99	\$2,99	\$2,99	41,1%	0,0%	56,4%	47,7%	44,3%	1.228,59	0	1.686,36	1.425,93	1.325,47	
Iglo	\$2,99	\$2,99	\$2,99	29,8%	52,1%	0,0%	38,3%	32,7%	891,32	1.557,19	0	1.144,27	976,83	
Jal	\$2,99	\$2,99	\$2,99	16,5%	23,9%	28,1%	0,0%	17,0%	493,05	715,21	839,29	0	508,30	
Gut&Günstig	\$2,99	\$2,99	\$2,99	6,6%	14,1%	9,4%	7,8%	0,0%	197,34	423,09	281,36	234,42	0	
None of the above	\$0,00	\$0,00	\$0,00	6,0%	9,8%	6,1%	6,2%	6,0%	0	0	0	0	0	



## Appendix 90 - Simulation: Sensitivity to Price (per serving) in Frosta

### FROSTA

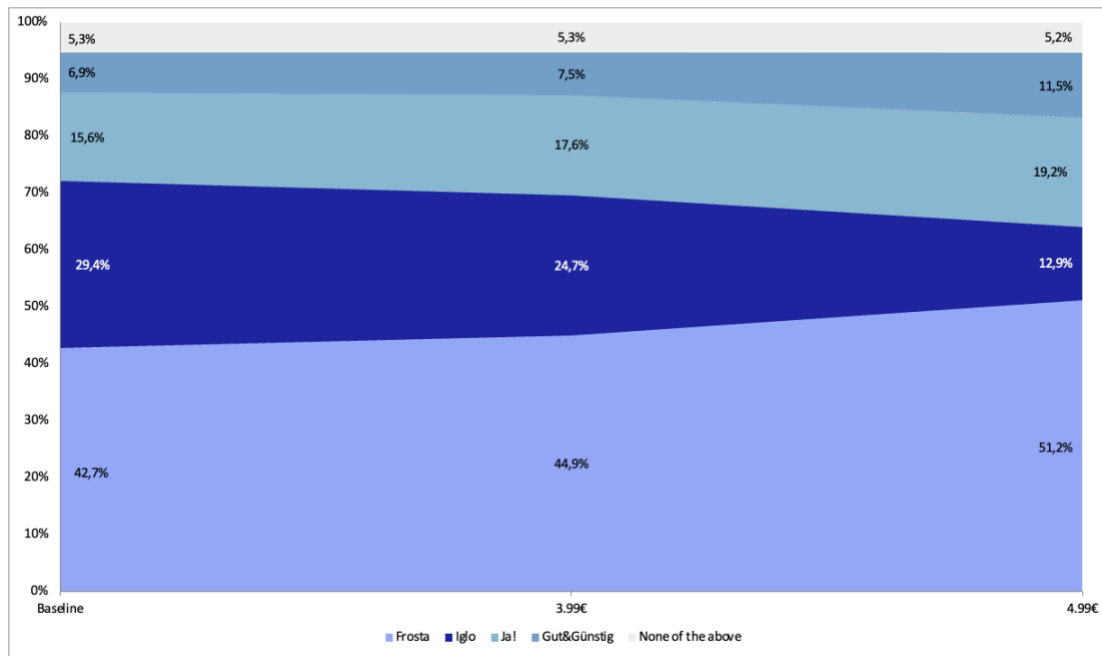
	Price			Preference share			Revenue projections (assuming 1,000 units offered)		
	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€
Frosta	\$2,99	\$3,99	\$4,99	42,7%	35,5%	33,1%	1.276,73	1.417,65	1.650,19
Iglo	\$2,99	\$2,99	\$2,99	29,4%	33,5%	35,2%	879,66	1.000,75	1.050,99
Jal	\$2,99	\$2,99	\$2,99	15,6%	16,9%	18,6%	466,74	506,21	556,74
Gut&Günstig	\$2,99	\$2,99	\$2,99	6,9%	8,2%	8,7%	207,21	243,69	260,13
None of the above	\$0,00	\$0,00	\$0,00	5,3%	5,9%	4,5%	0	0	0

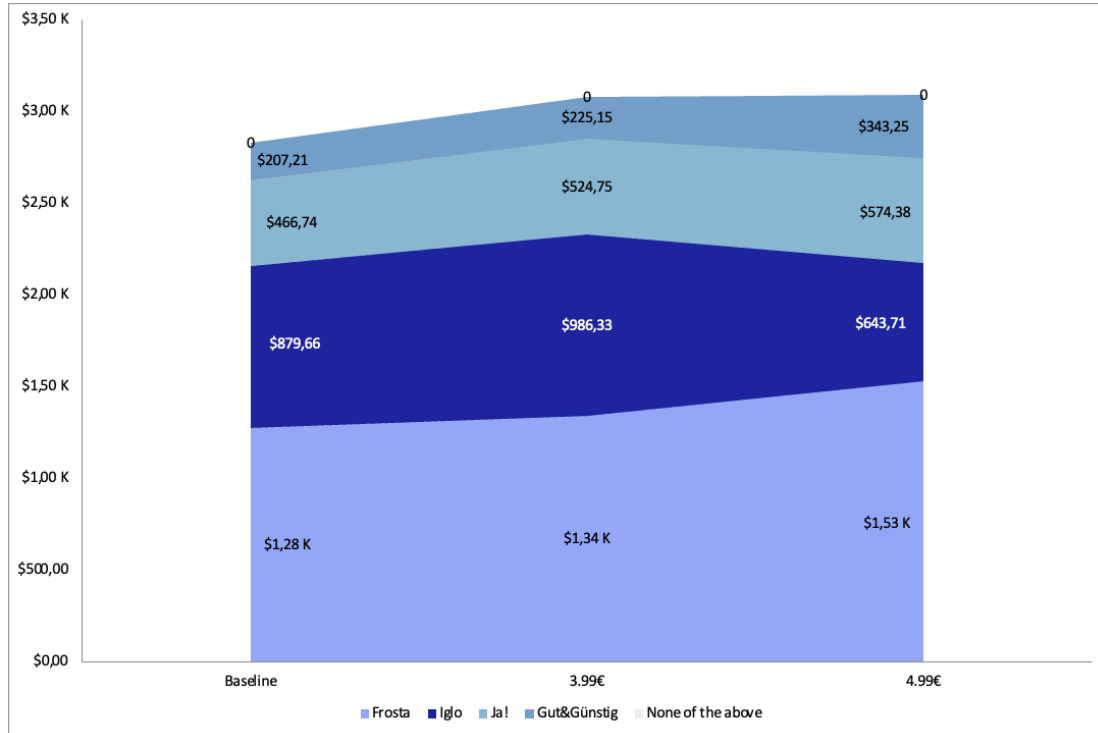


## Appendix 91 - Simulation: Sensitivity to Price (per serving) in Iglo

### IGLO

	Price		Preference share			Revenue projections (assuming 1,000 units offered)			
	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€
Frosta	\$2,99	\$2,99	\$2,99	42,7%	44,9%	51,2%	1.276,73	1.342,81	1.530,28
<b>Iglo</b>	<b>\$2,99</b>	<b>\$3,99</b>	<b>\$4,99</b>	<b>29,4%</b>	<b>24,7%</b>	<b>12,9%</b>	<b>879,66</b>	<b>986,33</b>	<b>643,71</b>
Ja!	\$2,99	\$2,99	\$2,99	15,6%	17,6%	19,2%	466,74	524,75	574,38
Gut&Günstig	\$2,99	\$2,99	\$2,99	6,9%	7,5%	11,5%	207,21	225,15	343,25
None of the above	\$0,00	\$0,00	\$0,00	5,3%	5,3%	5,2%	0	0	0

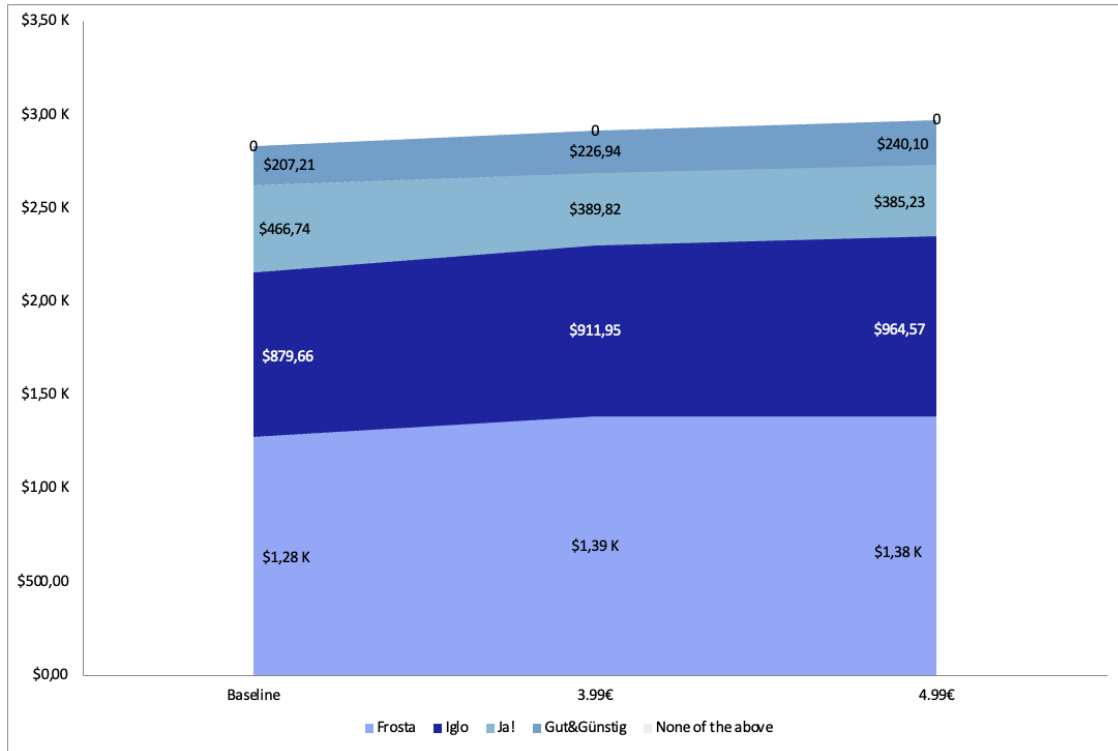
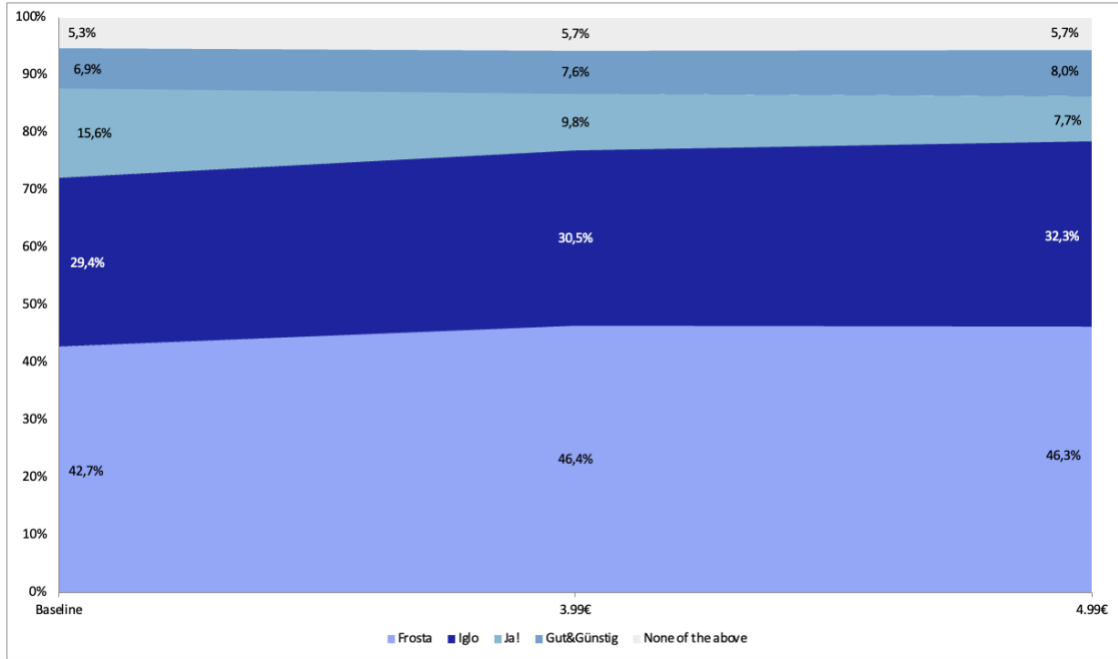




## Appendix 92 - Simulation: Sensitivity to Price (per serving) in Ja!

### Ja!

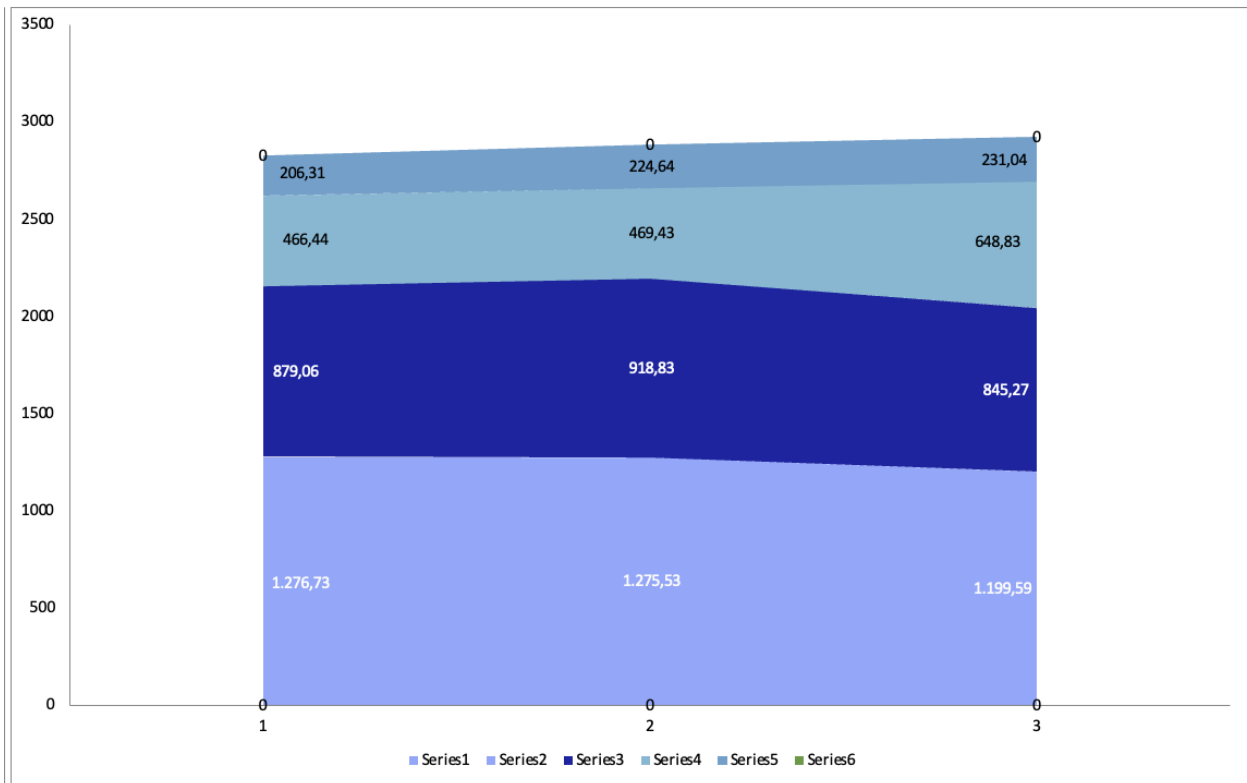
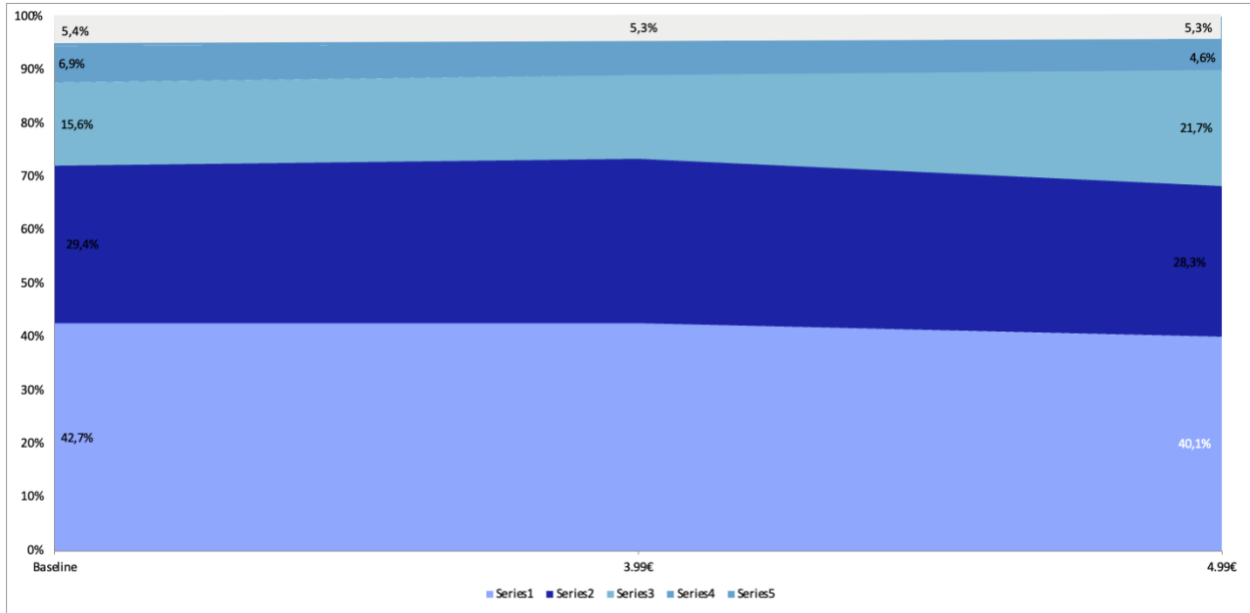
	Price			Preference share			Revenue projections (assuming 1,000 units offered)			
	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€	Baseline	3.99€	4.99€	
Frosta	\$2,99	\$2,99	\$2,99	\$2,99	42,7%	46,4%	46,3%	1,276,73	1,388,26	1,384,37
Iglo	\$2,99	\$2,99	\$2,99	\$2,99	29,4%	30,5%	32,3%	879,66	911,95	964,57
Ja!	\$2,99	\$3,99	\$4,99	\$4,99	15,6%	9,8%	7,7%	466,74	389,82	385,23
Gut&Günstig	\$2,99	\$2,99	\$2,99	\$2,99	6,9%	7,6%	8,0%	207,21	226,94	240,10
None of the above	\$0,00	\$0,00	\$0,00	\$0,00	5,3%	5,7%	5,7%	0	0	0



## Appendix 93 - Simulation: Sensitivity to Price (per serving) in Gut&Günstig

### GUT & GÜNSTIG

	Price		Revenue projections (assuming 1,000 units offered)						
	Baseline	3.99€	Baseline	3.99€	4.99€	Baseline	3.99€		
Frosta	\$2.99	\$2.99	\$2.99	42.7%	42.7%	40.1%	1,276.73	1,275.53	1,199.59
Iglo	\$2.99	\$2.99	\$2.99	29.4%	30.7%	28.3%	879.06	918.83	845.27
Jal	\$2.99	\$2.99	\$2.99	15.6%	15.7%	21.7%	466.44	469.43	648.83
Gut&Günstig	\$2.99	\$3.99	\$4.99	6.9%	5.6%	4.6%	206.31	224.64	231.04
None of the above	\$0,00	\$0,00	\$0,00	5.4%	5.3%	5.3%	0	0	0



### Appendix 94 – Conjoint.ly Personas

	Ben	Karo	Helen	Hermann
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Age Group	18-27	18-27	28-46; 47-58	>59
Gender	Male	Female	Female	Male
Educational Level	Bachelor, Abitur, Ausbildung, Mittlere Reife	Bachelor, Master, Ausbildung, Abitur, Mittlere Reife	Bachelor, Abitur, Mittlere Reife, Ausbildung	Abitur, Ausbildung, Bachelor, Master, Mittlere Reife
Occupation	Student	Employed	Employed, Self-Employed, Prefer not to say	Retired
Living Arrangements	Living with Flatmates	Living with a Partner	Living with a family	Single Household
Frozen RTE meal consumption	All Frequencies included	All Frequencies included	All Frequencies included	All Frequencies included

## Appendix 95 – Personas Brand Preferences

### Brand preferences

Attribute	Ben	Karo	Helen	Hermann	All responses	
Frosta		1,3	19,6	18,5	14,7	13,1
Iglo		6,3	0,7	0,4	13,7	7,9
Gut&Günstig		4,6	2,1	8,2	8,2	-3,0
Ja!		-9,5	-20,1	-13,4	-27,4	-19,2

## Appendix 96 – Personas Attribute Preferences

### Attribute importance: Frosta

Attribute	Ben	Karo	Helen	Hermann	All responses
Cooking method	24,6%	22,6%	17,4%	29,5%	21,6%
Meal size	17,0%	13,6%	23,5%	28,0%	19,3%
Cooking time	10,8%	17,1%	25,0%	4,5%	15,7%
Meal type	19,9%	13,3%	9,4%	15,1%	14,8%
Price (per serving)	16,3%	19,2%	13,3%	5,8%	14,3%
Ingredients/ Nutritional value	11,4%	14,3%	11,4%	17,2%	14,3%
<b>Sum</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

### Attribute importance: Iglo

Attribute	Ben	Karo	Helen	Hermann	All responses
Ingredients/ Nutritional value	18,7%	20,2%	19,8%	20,7%	20,0%
Meal type	23,0%	23,4%	16,8%	10,9%	18,3%
Meal size	14,7%	10,8%	15,1%	22,5%	16,3%
Cooking time	13,0%	13,6%	20,2%	17,8%	15,5%
Cooking method	15,6%	15,8%	10,7%	21,3%	15,2%
Price (per serving)	15,0%	16,4%	17,4%	6,8%	14,7%
<b>Sum</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

### Attribute importance: Jal

Attribute	Ben	Karo	Helen	Hermann	All responses
Ingredients/ Nutritional value	19,9%	19,1%	12,4%	18,7%	18,9%
Cooking method	18,6%	17,6%	20,5%	30,6%	17,8%
Price (per serving)	15,5%	13,4%	11,6%	14,7%	16,9%
Cooking time	14,6%	20,5%	21,5%	4,8%	16,8%
Meal size	14,6%	17,6%	18,0%	21,6%	15,7%
Meal type	16,9%	11,8%	16,2%	9,7%	14,0%
<b>Sum</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

### Attribute importance: Gut&Günstig

Attribute	Ben	Karo	Helen	Hermann	All responses
Cooking method	24,7%	21,2%	23,5%	38,7%	25,4%
Meal type	17,8%	18,2%	28,4%	18,4%	18,3%
Meal size	15,6%	14,3%	12,3%	19,8%	17,1%
Cooking time	18,4%	18,5%	17,4%	12,1%	16,4%
Ingredients/ Nutritional value	12,7%	14,1%	13,6%	3,9%	13,4%
Price (per serving)	10,7%	13,7%	4,8%	7,2%	9,4%
<b>Sum</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

### Attribute importance: Average

Attribute	Ben	Karo	Helen	Hermann	All responses
Cooking method	22,0%	20,8%	18,3%	26,9%	25,4%
Meal type	19,1%	18,2%	22,3%	22,0%	18,3%
Meal size	14,1%	13,9%	16,0%	15,4%	17,1%
Cooking time	16,5%	16,4%	17,1%	12,4%	16,4%
Ingredients/ Nutritional value	14,8%	16,7%	13,9%	13,1%	13,4%
Price (per serving)	13,5%	14,0%	12,4%	10,2%	9,4%
<b>Sum</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

## Appendix 97 – Personas Level Preferences

### Preferences for levels: Frosta

Attribute	Level	Ben	Karo	Helen	Hermann
Cooking time	5 minutes	3,9%	6,5%	9,6%	0,6%
Cooking time	12 minutes	0,7%	6,9%	8,9%	-3,0%
Cooking time	20 minutes	-4,6%	-13,3%	-8,6%	2,4%
Cooking method	Pan	0,6%	3,3%	4,1%	-1,2%
Cooking method	Oven	12,3%	14,4%	1,6%	17,2%
Cooking method	Microwave	-12,9%	-17,6%	-5,7%	-16,0%
Meal type	Comfort / Cozy	3,0%	-0,3%	1,3%	3,5%
Meal type	Health / Fitness	13,0%	2,6%	5,5%	5,5%
Meal type	Vegetarian	-16,0%	-2,3%	6,7%	-9,0%
Ingredients/ Nutritional value	All-natural	0,6%	3,1%	5,1%	4,8%
Ingredients/ Nutritional value	Low-calorie	-2,4%	-4,9%	6,5%	-3,5%
Ingredients/ Nutritional value	No additives	-3,2%	2,8%	0,4%	-7,9%
Ingredients/ Nutritional value	Locally sourced	5,0%	-0,9%	1,0%	6,7%
Price (per serving)	2.99€	10,8%	9,6%	7,5%	1,4%
Price (per serving)	3.99€	1,1%	-0,2%	0,7%	0,3%
Price (per serving)	4.99€	-11,9%	-9,3%	-6,8%	-1,7%
Meal size	Single Serving	-0,6%	-9,4%	-3,4%	5,4%
Meal size	Couple Serving	3,6%	6,6%	2,8%	12,0%
Meal size	Family Serving	-2,9%	2,9%	10,6%	-17,3%

### Preferences for levels: Iglo

Attribute	Level	Ben	Karo	Helen	Hermann
Cooking time	5 minutes	7,1%	5,1%	4,1%	9,8%
Cooking time	12 minutes	1,6%	3,6%	6,4%	-11,1%
Cooking time	20 minutes	-6,7%	-8,7%	-0,6%	1,3%
Cooking method	Pan	-0,1%	2,2%	2,7%	-0,1%
Cooking method	Oven	7,5%	9,9%	5,0%	5,5%
Cooking method	Microwave	-7,4%	-12,1%	-7,7%	-5,5%
Meal type	Comfort / Cozy	0,4%	-2,6%	-8,1%	5,7%
Meal type	Health / Fitness	14,3%	7,7%	10,8%	0,5%
Meal type	Vegetarian	-14,7%	-5,0%	2,7%	-6,3%
Ingredients/ Nutritional value	All-natural	6,1%	10,2%	11,8%	1,2%
Ingredients/ Nutritional value	Low-calorie	-0,1%	-6,3%	-4,6%	-13,7%
Ingredients/ Nutritional value	No additives	-11,6%	-7,5%	-5,1%	1,9%
Ingredients/ Nutritional value	Locally sourced	5,6%	3,6%	2,1%	10,6%
Price (per serving)	2.99€	5,4%	10,7%	12,2%	2,3%
Price (per serving)	3.99€	5,2%	1,5%	-1,2%	-2,8%
Price (per serving)	4.99€	-10,5%	-12,2%	-11,0%	0,6%
Meal size	Single Serving	-0,2%	-6,8%	-7,6%	5,0%
Meal size	Couple Serving	3,5%	2,7%	3,8%	10,9%
Meal size	Family Serving	-3,2%	4,1%	3,8%	-15,9%

Preferences for levels: Ja!

Attribute	Level	Ben	Karo	Helen	Hermann
Cooking time	5 minutes	13,2%	14,9%	11,5%	2,4%
Cooking time	12 minutes	-7,6%	-5,4%	2,0%	-2,9%
Cooking time	20 minutes	-5,7%	-9,5%	-13,5%	0,5%
Cooking method	Pan	2,4%	1,6%	1,0%	10,0%
Cooking method	Oven	1,0%	1,3%	1,2%	-0,9%
Cooking method	Microwave	-3,4%	-12,8%	-10,2%	-9,0%
Meal type	Comfort / Cozy	-8,9%	-2,0%	-6,1%	-5,3%
Meal type	Health / Fitness	14,8%	1,0%	5,8%	4,2%
Meal type	Vegetarian	-5,9%	6,0%	1,8%	1,1%
Ingredients/ Nutritional value	All-natural	5,0%	4,5%	5,5%	1,5%
Ingredients/ Nutritional value	Low-calorie	8,1%	0,8%	5,1%	2,8%
Ingredients/ Nutritional value	No additives	-6,4%	-3,9%	-3,8%	-13,0%
Ingredients/ Nutritional value	Locally sourced	-6,7%	-1,4%	3,4%	8,7%
Price (per serving)	2.99€	15,3%	10,2%	5,0%	10,4%
Price (per serving)	3.99€	-4,3%	-5,0%	0,9%	-2,1%
Price (per serving)	4.99€	-11,0%	-7,3%	-6,0%	-8,3%
Meal size	Single Serving	-3,1%	-2,1%	-5,0%	8,7%
Meal size	Couple Serving	5,8%	-3,3%	-4,1%	8,6%
Meal size	Family Serving	-2,7%	7,4%	9,1%	-17,3%

Preferences for levels: Gut&Günstig

Attribute	Level	Ben	Karo	Helen	Hermann
Cooking time	5 minutes	11,7%	10,4%	8,0%	1,2%
Cooking time	12 minutes	-2,5%	-1,4%	2,7%	5,9%
Cooking time	20 minutes	-9,3%	-9,1%	-10,7%	-7,1%
Cooking method	Pan	4,7%	8,2%	11,3%	6,9%
Cooking method	Oven	8,4%	3,9%	4,6%	15,1%
Cooking method	Microwave	-13,0%	-12,1%	-6,7%	-21,9%
Meal type	Comfort / Cozy	5,4%	3,1%	2,5%	6,4%
Meal type	Health / Fitness	5,2%	-5,1%	-14,6%	2,4%
Meal type	Vegetarian	-10,6%	6,0%	17,1%	-8,8%
Ingredients/ Nutritional value	All-natural	5,0%	6,9%	2,8%	0,6%
Ingredients/ Nutritional value	Low-calorie	-5,8%	-5,5%	5,2%	2,7%
Ingredients/ Nutritional value	No additives	-7,0%	-7,7%	4,1%	-11,0%
Ingredients/ Nutritional value	Locally sourced	7,8%	6,3%	5,5%	7,7%
Price (per serving)	2.99€	14,4%	11,6%	9,6%	6,8%
Price (per serving)	3.99€	-4,2%	-5,8%	2,8%	1,3%
Price (per serving)	4.99€	-10,2%	-7,8%	-6,8%	-8,1%
Meal size	Single Serving	2,0%	-3,3%	3,3%	6,3%
Meal size	Couple Serving	6,9%	-5,9%	4,5%	7,9%
Meal size	Family Serving	-8,9%	7,2%	7,8%	-14,3%

Preferences for levels: Average

Attribute	Level	Ben	Karo	Helen	Hermann
Cooking time	5 minutes	9,0%	9,2%	8,3%	3,5%
Cooking time	12 minutes	-1,9%	0,9%	5,0%	-2,8%
Cooking time	20 minutes	-7,1%	-10,1%	-13,3%	-0,7%
Cooking method	Pan	1,9%	3,8%	4,3%	3,9%
Cooking method	Oven	7,3%	9,9%	3,3%	9,2%
Cooking method	Microwave	-9,2%	-13,7%	-7,6%	-13,1%
Meal type	Comfort / Comfort	0,0%	-1,7%	4,5%	2,6%
Meal type	Health / Fitness	11,8%	0,5%	3,8%	3,2%
Meal type	Vegetarian	-11,8%	1,2%	0,2%	-5,7%
Ingredients/ Nutritional value	All-natural	4,2%	6,2%	6,3%	2,0%
Ingredients/ Nutritional value	Low-calorie	0,0%	-4,7%	5,4%	-2,9%
Ingredients/ Nutritional value	No additives	-7,1%	-3,3%	5,1%	-7,5%
Ingredients/ Nutritional value	Locally sourced	2,9%	1,9%	2,2%	8,4%
Price (per serving)	2.99€	11,4%	10,5%	8,6%	5,2%
Price (per serving)	3.99€	-0,5%	-1,4%	-1,0%	-0,8%
Price (per serving)	4.99€	-10,9%	-9,2%	7,6%	-4,4%
Meal size	Single Serving	-0,5%	5,4%	7,3%	6,3%
Meal size	Couple Serving	4,9%	0,0%	-0,5%	9,8%
Meal size	Family Serving	-4,4%	5,4%	7,8%	-16,2%

## Appendix 100 – Desktop vs. Mobile Phone Layout

Which of the following Frozen ready to eat meals would you choose?

Brand	Iglo	Ja!	Gut&Günstig	Frosta
Ingredients/ Nutritional value	Low-calorie / light option	Locally sourced / sustainable	Locally sourced / sustainable	All-natural / organic emphasis
Meal size	Single Serving (Portion for 1)	Single Serving (Portion for 1)	Family Sized Serving (Portion for >3)	Single Serving (Portion for 1)
Cooking method	Microwave	Oven	Oven	Microwave
Meal type	Health / Fitness Meals	Health / Fitness Meals	Vegetarian / Vegan Meals	Health / Fitness Meals
Cooking time	20 minutes	5 minutes	5 minutes	12 minutes
Price (per serving)	2.99€	2.99€	4.99€	4.99€
	CHOOSE	CHOOSE	CHOOSE	CHOOSE

Go back

X NONE OF THE ABOVE

Which of the following Frozen ready to eat meals would you choose?

**Ja!**

Cooking method  
Oven

Ingredients/ Nutritional value  
No additives / flavor enhancers

Meal size  
Single Serving (Portion for 1)

Cooking time  
12 minutes

Meal type  
Health / Fitness Meals

Price (per serving)  
2.99€

✓ CHOOSE