



# The influence of a crisis on food consumption lifestyle trends

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- A case study of food consumption lifestyle trends in Austria in combination with the COVID-19 pandemic.

Master Thesis submitted in fulfillment of the Degree

Master of Science in Management

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Vienna, June 7th, 2022

## **AFFIDAVIT**

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## ABSTRACT

The COVID-19 crisis has influenced various aspects of human life. This was also the case for the food and beverage (F&B) industry, where several restaurants had to close due to restrictions and mandatory lockdowns. Consumers around the world therefore have adapted their food consumption lifestyles. At least in the short run. This thesis therefore aimed to find out if food consumption lifestyles are also affected in the long run. The conducted literature review provides a profound round up on influences of food consumption; how prior crises have impacted food consumption patterns of individuals and societies; as well as reviews the prevalent food consumption lifestyle trends: health, sustainability, convenience, and pleasure/quality.

To understand how the COVID-19 crisis has affected these trends, a mixed research approach was applied. The quantitative online survey aimed to find out to what extend consumers have changed their food consumption patterns because of the pandemic. The qualitative interviews with food experts gave insights in their perceived developments and changes. These two viewpoints were then compared to see if they align or if there are discrepancies.

A lot of experts assumed that food consumption patterns and food lifestyle trends have only been altered in the short-run and are now back to pre-crisis times or have been altered due to reasons other than the pandemic. According to the consumers and the corresponding hypothesis testing however, the current food consumption patterns differ from those before pandemic. Three trends have intensified and only for one trend, convenience, there was no difference observable.

Although there were many discrepancies, this comparison of viewpoints resulted in an interesting picture, which showed that the pandemic has indeed influenced food consumption. Among the most important takeaways is that the focus on food has increased and foodie culture is on the rise. Especially valued by consumers is sustainable food consumption, a trend which has intensified due to the pandemic. A trend which also has intensified, however not as severe as the sustainability trend, is the health trend, which is particularly interesting when conducting research about a health crisis.



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# 1 INTRODUCTION

## 1.1 Presentation of Problem

The importance of food is beyond dispute. Human life needs nourishment to survive and therefore the food industry has been one of the most important industries worldwide for a long period of time. Due to it being a necessity, it possesses political and economic power on a high degree (Swinburn & Gerritsen, 2019). However, in the past centuries, the food industry has changed tremendously. This is due to changing requirements consumers have with regards to their food consumption. Apart from availability, which used to be the single most important factor of food supply for a long time, the food industry must make sure that it meets other expectations as well (Schluter & Lee, 1999). In the past years, many global challenges like climate change, overconsumption and pollution have stimulated the industry responsible actors to conduct a couple of changes in their proceedings. These challenges also have forced the food industry's most important stakeholder group, the consumers, not only to rethink but some even to change at least a few of their food consumption patterns. As a result, nowadays, a mentionable number of consumers makes more sustainable food choices to protect one's own health and the environment in general. The fulfilment of those criteria has become a requirement to many - especially in the western world. As a result, changes in food consumption that arise throughout the time is a highly discussed topic among researchers (European Public Health Alliance, 2019; Sadiku et al, 2019).

One of the most important changes of food consumption in the last couple of years is that the individual significance of food consumption has changed. Apart from being a basic human need, food consumption may please other needs as well, however these vary from person to person. In particular, the lifestyle a person tends to follow. For instance, some individuals arrange various aspects of their life around their food intake, others see food entirely as a basic human need and do not mind about the manner of food consumption. Between those two extremes, there exists a broad range of other attitudes and the corresponding food consumption lifestyles people follow (Nie & Zepeda, 2011). Another issue responsible for changing consumption patterns is societal change. Societal change, which can also be named societal development, is strongly influenced by customs, social norms, and institutional regulations. Generally, the phrase can be used to describe developments within a society and this process also influences food consumption (Parekh & Klintman, 2021). Together, the lifestyles people tend to follow, societal change but also other external factors like the previously mentioned global challenges are responsible for the development of various food trends and a certain type of food culture that is lived by people (Boutaud, Becuț & Marinescu, 2016).

In 2020 the food industry had to face a situation like no other. The COVID-19 virus outbreak had an impact on almost every aspect of human life. Since the first lockdown in March 2020, several customs and practices have changed. In almost every country, stay at home orders have been set to prevent the virus from spreading throughout the world. This step has changed the consumption behaviour in several branches and the food industry was one of the most affected among them. Restaurants and several other food outlets had to close temporarily, at least for actual visits. This was also the case in Austria and many other European countries, where usually visits to restaurants, coffeehouses and bars are an anchored part of the countries culture and identity. Consequently, consumers food consumption behaviour but also the food offerings provided by businesses had to adapt to this new situation. As soon as news outlets spread the news of a lockdown, humans all around the world surged into supermarkets to get as much food as possible. People started hoarding and buying items that they usually would not tend to buy. Consequently, people also adapted the way of living, as for example to spend more time in the kitchen at home during the first phase of the pandemic (Swinnen & Ros, 2020; Alkawasbeh, 2021).

Depended on the geographical area, several other lockdown periods and further restrictions have followed. However, people slowly started to adjust to the new normality, which led to several new customs among consumers but also new businesses and offerings among restaurants. Although the pandemic has not officially ended, in spring 2022, regulations allowed societies to live their life almost restriction free, with being able to do the same things as prior to the pandemic. However, in how far the food consumption lifestyles of Austrians have been influenced by the decisive events of the pandemic is the topic of this thesis.

## **1.2 Aim of research & Research Questions**

As already highlighted above, there already exists a mentionable amount of literature on how the coronavirus affects various aspects of the food industry. However, the literature on the long-term effects the pandemic has on food lifestyle trends is still limited. Moreover, there has been little research focusing on the perception and understanding restaurant operators and other food experts have towards these changes. Therefore, this research could be of particular interest to the entire food industry because it could shed the light on the impact this crisis has on Austria's food consumption trends and how a crisis may influence food behavior in general. To be exact, it could help businesses to adapt to those changes in consumption trends and patterns after the restrictions and in the recovery phase post lockdown. To contribute to breaching the identified gap of knowledge, the current thesis aims at answering the following research question:

*What is the effect of the COVID-19 crisis on food lifestyle trends in Austria?*

Specifically, the author will explore the two perspectives on the evolving food consumption lifestyles: the customers' and the F&B experts; and will further assess the overlaps and gaps in the identified trends. Finally, the findings will be used to devise recommendations for the restaurant sector, but also the food industry in general. These goals will be achieved by answering the following research sub-questions:

*RQ1. In the eyes of consumers, how has their food consumption behaviour changed as a result of the crisis?*

*RQ2. In the eyes of industry experts, how has food consumption changed as a result of the crisis?*

*RQ3. What are the commonalities and discrepancies between the trends resulting from consumers' food consumption patterns and the perceived trends by industry experts?*

To sum it up, the authors research questions (1) focus on the changes in the food consumption patterns related to the COVID-19 crisis, and (2) the identification and potential implications for the post-COVID-19 food industry. To find answers to the research questions, the author makes use of existing literature in the fields of food culture, food lifestyle trends and food consumption in general, as well as these in combination with the influence of crisis and in particular the COVID-19 crisis. Subsequently, primary research is conducted with the help of a mixed research approach. On the one hand, a quantitative survey provides data about the food consumption changes of consumers. On the other hand, expert interviews demonstrate the perceived changes of food consumption lifestyle trends in the eyes of food industry experts. This comparison should illustrate if food-experts have understood and recognized the changes in food consumption patterns and give answer to the research question concerning potential discrepancies.

## 2 LITERATURE REVIEW

Since this thesis aims to find out in how far a crisis may influence food consumption lifestyle trends it is of great influence to gain a deeper understanding on the respective theory. In this case, it was of importance to gain insights in how previous researchers have evaluated the influencers of food consumption, and a crisis as such. Thus, the versatility of food culture and the corresponding food lifestyle trends are highlighted as well as an overview on past crises and their effect on food consumption given.

### 2.1 FOOD CULTURE AND FOOD CONSUMPTION LIFESTYLES

#### 2.1.1 Defining food culture

According to Kröber and Kluckhohn (1952), culture can be defined as a pattern of behavior between several individuals, groups, or societies of various sizes. The key elements of culture are traditions and values that are passed on from one generation to another. Individuals sharing the same culture do possess similar patterns in thinking, feeling and in their day-to-day actions. Culture, therefore, is considered as the social surrounding, often also the social environment, that influences a consumer's behavior (Kröber & Kluckhohn, 1952). According to Kröber-Riel and Gröppel-Klein (2013), culture is most frequently named in combination with festivities but also with lifestyles, which are adequate for illustrating humans' behavioral patterns that result from culture. Culture and associated behavioral patterns are compared and measured on an aggregated level (Kröber-Riel & Gröppel-Klein, 2013).

Culture therefore also has an influence on how people consume food, which is often referred to as "food culture". The term "food culture" differs across various contexts since food is of interest in various sciences. For example, in nutritional science, the term describes the available food and nutritive substances (Nordström et al, 2013). In the context of lifestyle research, food culture encompasses diverse attributes such as the selection of food products, festivities around food consumption or even the place and time of consumption itself. It can also be studied from the point of view of anthropology, where it acts as a powerful instrument to learn about individual societies. About people's behaviors, thoughts, and feelings (Oxford University Press, 2012).

The definition of Maya Wilson (2020) is rather broad and generalizes food culture as general practices, attitudes, beliefs around food consumption but also incorporates the culinary offer, distribution as well as networks and institutions that are surrounding the production of food. In other words, food culture is not only about ethical food heritage but also about the impact sur-

rounding has on what a society eats (Wilson, 2020). Paolo Corvo (2019) has a comparable definition since he states that food culture is everything that connects a human being with food and influences the corresponding consumption behavior (Corvo, 2019).

As already mentioned, food culture includes people's values, attitudes, and beliefs towards food consumption, and therefore, it is closely related to people's lifestyles. Although food consumption patterns may be subject to change, food culture is considered as relatively stable, at least for a certain period (Corvo, 2019). In anthropology, food culture is defined as a culinary norm of eating that is existent within a certain group of people. Herby, "food culture" is also used to describe food consumption patterns within smaller communities, as for example a household or institutions, such as universities and workplaces (Grimaldi, Fassino & Porporato, 2019). Boutaud, Becuț & Marinescu (2016), divide food culture from the micro level to the macro level. Although this thesis primarily focuses on the macro-level of food culture, the micro-level (family & friends) will also be touched upon, since the corresponding social groups greatly influence food consumption lifestyles and preferences (Boutaud, Becuț & Marinescu, 2016). According to Alexandra Tarr (2016), cultural heritage and ethnicity are large contributors to food culture and consequently, also influence food choices and eating patterns. This ethnical-heritage and the evolutionary-historical dimension of food culture will be elaborated upon in the following paragraphs to give an overview on the history of food consumption (Wilson, 2020; Tarr, 2016; Askegaard & Madson, 1995).

### **2.1.2 The interconnectivity of cultural heritage and food consumption**

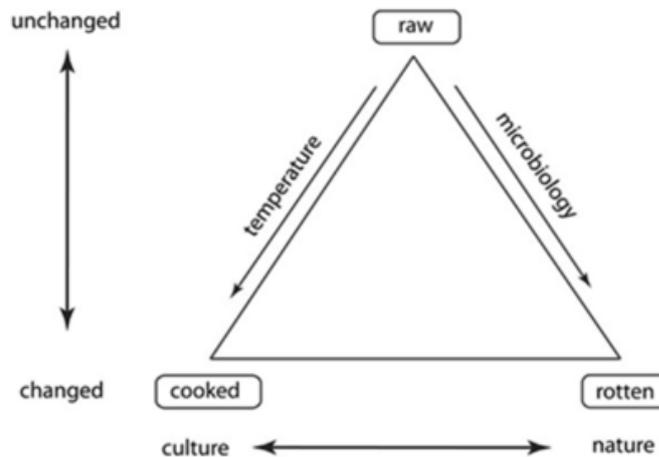
There is a constant interplay between food consumption and culture. In fact, food consumption may shape a country's culture, but a country's culture is also responsible for the manner of how people consume food (Mennell, 1992). To illustrate this interconnectivity between humans and food, one shall have a look at the history of human food consumption. In the early phases of human life, where humans had the constant fear of becoming food themselves, the only purpose of food was survival. At a later stage, the discovery of fire helped to develop patterns and, therefore a certain kind of culture around food consumption—for instance, interhuman communication, lighting but also dietary patterns. The ability to modify meat and nature in general changed the relationship between humans and food (Civitello, 2008). Anna Murcott (1982) in "The cultural significance of food and eating" and Boutaud, Becuț & Marinescu (2016) in "Food and culture" refer to Levi Strauss (1975), who argued that the way humanity began using fire for food preparation is the invention which made humans human. According to him, animals consume food due to a biological need; humans tend to have several other reasons. People started to put thoughtfulness in their food preparation, which helped to develop cultural patterns. As the world developed and the increasing human population settled on distinctive places around the globe, these cultural patterns developed into distinguishable entities (Murcott, 1982; Boutaud, Becuț & Marinescu, 2016, Lévi-Strauss, 1964).

The French ethnologist Claude Lévi Strauss (1975), as cited by Murcott (1982) and Brzostek (2017), introduced the culinary triangle which enables a good illustration of how food consumption, in particular a country's cuisine, relates to a society and a country's traditions (Figure 1). Among researchers, it is the most classical contribution to understanding of food consumption practices. According to Strauss (1975), cooking is a language that enables identifying a society's structures, beliefs, patterns, and practices. Levi Strauss spent a lot of time researching the eating behavior of various nationalities and subgroups within. As a result, he created a framework illustrating the cultural distinction of food choices and eatables in general. While cultures may differ in what they consider food, Strauss (1975) puts eatables into three categories, (1) raw, (2) cooked, and (3) rotten. (Brzostek, 2017; Murcott, 1982; Levi-Strauss, 1975).

According to Strauss (1975), the triangle offers a more specific framework for comparison, than simply comparing one food culture to another. Food consumption patterns are very often connected with regional cultural meanings and customs and therefore can have several contexts. Strauss also names some very interesting historical examples of how cultures at first tend to interpret another culture's food consumption patterns in a twisted manner. However, later learn to understand and to incorporate these food consumption patterns in their food culture. One of the examples being the French accepting that vegetables may be eaten raw due to experiences in Italian restaurants. Further, he gives an example of American soldiers during the second world war in France, Normandy. Since the soldiers were not aware of the French custom of eating ripe cheeses, they mistook its smell for the smell of rotten bodies and therefore burned down several farms in Normandy, without even looking into it (Strauss, 1975; Davis, 2013).

One can turn the triangle and examine it from every side (Strauss, 1975). When observing the triangle from the most mainstream perspective, as illustrated in the Figure 1, one can see that cooked food is the result of cultural processes, like the usage of heat. As mentioned previously, Levi Strauss stated that the usage of heat (fire) and other tools makes humans human, and this is the point where food consumption becomes a cultural process. The triangle further indicates that for cultures, that have relatively mainstream eating habits, uncooked raw food gives the idea of incompleteness and food that has rotten gives the impression of disgust and therefore is considered as not edible (Strauss, 1975; Murcott, 1982; Brzostek, 2017). However, one can argue that the triangle was introduced in the year 1975 and therefore does not incorporate the lately observed patterns that due to globalization counterculture practices turn into mainstream eating patterns (Davis, 2013). Due to globalization, some countries eating patterns have become more indistinct and are not that easy to differentiate anymore, like they did in the examples Levi Strauss introduced in his literature. However, Strauss's research still shows the connectivity between a country's history, culture, and food consumption patterns (Davis, 2013).

FIGURE 1: CULINARY TRIANGLE LEVI STRAUSS



Source: Davis, 2009

### 2.1.3 Altered food consumption due to societal changes

This section primarily focusses on societal changes referred to as social developments and cultural changes. They are decisive concerning food culture and, therefore, humans' lifestyles and corresponding eating patterns. Societal changes could be accelerated by globalization, governmental decisions, migrating refugees, tourism, and especially the role of new technologies in recent years. A social change always implies an ongoing process or the movement from one juncture to another. A good example would be the influence the mass media had in the last decades. Societal change consists of several layers: governmental, politico-social, and finally, cultural change. One can therefore observe the social change from several standpoints. Such developments affect people's attitudes, norms, values, and behavior. Individuals within a society modify their behavior to comply with the new circumstances that are hurried by the issues that bring the societal change (Boutaud, Becuț & Marinescu, 2016). Another interesting aspect, which is stated by Askegaard & Madson (1995) is that over a longer period, social changes could appear in the form of trends and at times even as human evolution (Askegaard & Madson 1995).

Several food practices are very much connected with societal change. Social change influences how people eat and what people want to eat, thus people's food consumption lifestyles. The choice of food can be responsible for achieving sustainability goals and social justice, at least in the western world. Especially younger people are buying and eating food in a way to support their conception of a better world. Therefore, food consumption has become an integral part of politicized discussions, and therefore, the topic has also become an interest to policymakers in recent years (Motta & Martín, 2021).

Globalization and diminishing borders also affect food culture and consequently food consumption behavior. The increase in the supply of foreign food products in most markets worldwide can be linked to improvements in the conditions of production and transport facilities, which has a mentionable influence on food culture (Askegaard & Madson, 1995). As already indicated in the previous section, the identification of regional patterns has been drastically complicated. However, Ilmonen (1990) states that the internationalization of humans eating habits rather concerns the used ingredients and meals than completely changing the norms and categorizations of what one considers eatable. Therefore, one can assume that the previously introduced culinary triangle of Levi Strauss still holds true even if humans eating behavior is accommodating to other region's food culture (Ilmonen 1990; Davis, 2013).

#### **2.1.4 Food consumption as a lifestyle**

After elaboration on the cultural aspects of food consumption and the general construct of food culture, the following paragraphs will provide a detailed overview of how people build their lives around food consumption—stated differently, what importance people put on food consumption and how they live their lives accordingly. As already hinted in the sections above, food consumption has developed into an integral part of every person's identity. The willingness to consume some food over another conveys social identity, personal social relations, and a general way of living. In the article “the cultural significance of food and eating” the author Anne Murcott cites Atkinson (1980), who described these consumption patterns with the following anecdote “*a ‘mouthful of wine will convey very different meanings to the professional wine taster, the bon viveur, the Christian celebrating Holy Communion and the alcoholic down-and-out*” (p. 203). As one can see, the consumption of food or drinks may have different meanings to different people. A person's consumption patterns also give an overview of a certain code of conduct that is applied in the circle of social relationships, including family and friends, but also the society. These food consumption patterns are highly correlated with the general lifestyle a person aims to follow (Murcott, 1982).

## Lifestyle Definition

The extant literature presents different views on what constitutes a lifestyle (Jensen, 2007). Some researchers use the term lifestyle in a combination of how individuals live their lives or at least aim to live their lives (Kröber-Riel, 2013). Others refer to lifestyle as the sum of health-related factors, for example, the consumption of alcohol, sugar, fat, or the amount of physical exercise (Apostu, 2013; Kassie, 2004; WHO, 1999). Another frequently used definition focuses on the general consumption patterns of humans (Aydin & Ünal, 2016). According to Kröber-Riel (2004), lifestyles are studied on four different levels: (1) on a global level, to make assumptions about values that are observable throughout different cultures (2) a national level e.g., the lifestyle of Germans compared to the one of Italians (3) on the level of milieus and (4) on an individual level (Kröber-Riel, 2013). For the sake of this thesis, the author will include all the four above-mentioned levels and will not make a particular distinction. In general, lifestyles can describe the continued choices one makes in several contexts (Jensen, 2007; Kröber-Riel, 2013).

In the past, lifestyles were often limited to people's social class which is primarily based on money. Nowadays, this association has stopped due to individualization processes in societies. Individuals can choose the lifestyle they want to adopt (Barz et al, 2003). Therefore, the usage of the term "lifestyle" has become quite popular and intensively discussed in sociology but also in the media (Wilska, 2002). In the media, one can find such discussions in combination with trends such as sustainability and health (Apostu, 2013). This is because most literature or media combines lifestyle topics with the achievement of a more sustainable world since it is not only assumed but also proven that environmental problems result from humans' bad lifestyles. A lifestyle is nothing that is taken for granted or people are born with. It combines a person's way of living with developed values and attitudes. However, these values can also be absorbed from family members and the milieus a person is a part of. The media, globalization, and other external factors as for example, environmental problems, may also be responsible for shaping a person's values and attitudes and, therefore, the lifestyles a person tends to follow (Kröber-Riel & Gröppel-Klein, 2013). People choose their lifestyle according to social class, education, one's family and social networks, demographics such as gender and age and finally interpersonal influences. It is of importance to mention that a person may express him- or herself through multiple lifestyles (Ochieng, 2006). The projected lifestyle is shaped by the situational factors, such as accompanying people or the situation (Ochieng, 2006).

This variation in the lifestyle reflects the discrepancy between the self- and public image, described by the self-concept theory (Mummenday, 1997). The self-image is about how one assesses oneself and the public-image is about how one is seen by friends and relatives. Since these two images can vary drastically, people tend to adapt their lifestyle to different situations. The tendency to have several lifestyles can also be explained by ones "possible selves", which is a theory by Markus & Nurius (1986). "Possible selves" are lifestyles, humans see as desirable but

often cannot be realized due to financial or timely constraints (Markus & Nurius, 1986). However, when thinking about Barz et al (2003) argument that nowadays one's lifestyle is not necessarily bounded to income, one could assume that the theory of "possible selves" lifestyles is rather outdated. (Barz et al, 2003; Markus & Nurius, 1986;)

Lifestyles can be manifested through a person's food consumption patterns, what a person wears, where a person chooses to live and work, the choice of means of transport as well as media and educational aspects, how to spend one's leisure time for example where to travel to and what restaurants to visit. (Abu Bakar, Osman & Hitam, 2020; Gschwandtner, Jewell & Kambhampati, 2021) Marketers use these characteristics to segment consumers according to their lifestyles. This segmentation allows to learn more about the motivations and values shared by several customers. Due to the significance lifestyle has in marketing, there exists a vast amount of research that focusses on the development of distinctive lifestyle segments (Kröber-Riel & Gröppel-Klein, 2013). Among the most popular lifestyle studies belongs the "Value/Lifestyle segmentation" (VALS) introduced by the Stanford Institute in 1983. It is based on the Maslow Pyramid of Needs. The basic idea is to match the pyramid's separate levels to the lifestyle segments within a culture. To satisfy one's needs, one can choose between two paths. A path that orientates among others and one that orientates among one's inner values. Another frequently used approach to identify lifestyles is the "Every-Day-Life-Research-Approach", which was introduced by the Sinus-Institute. According to eight components of one's social situation and one's basic orientation, lifestyle and consumption patterns are identified (Szwacka-Mokrzycka, 2015).

As already hinted, the meaning of food consumption varies among people and cultures. The variation may stem from product itself, the consumer, the consumers' knowledge, beliefs, or attitudes, and the occasion or cultural context when the food is consumed (Kokkoris & Stavrova, 2021). In addition to those factors, the motivation for food choice can also be influenced by general interest. Quite common interest in health-related issues, ideological reasons, convenience, price, or familiarity. According to several researchers, sensory appeal, healthiness, convenience, and price are among the most important factors that influence food consumption but also food choice. These individual motivators may be merged and used for the explanation of entire society's food lifestyle choices as well as food trends. (Renner et al, 2011; Shepherd, Sparks & Guthrie, 1995)

## Differences in Motivators of food consumption

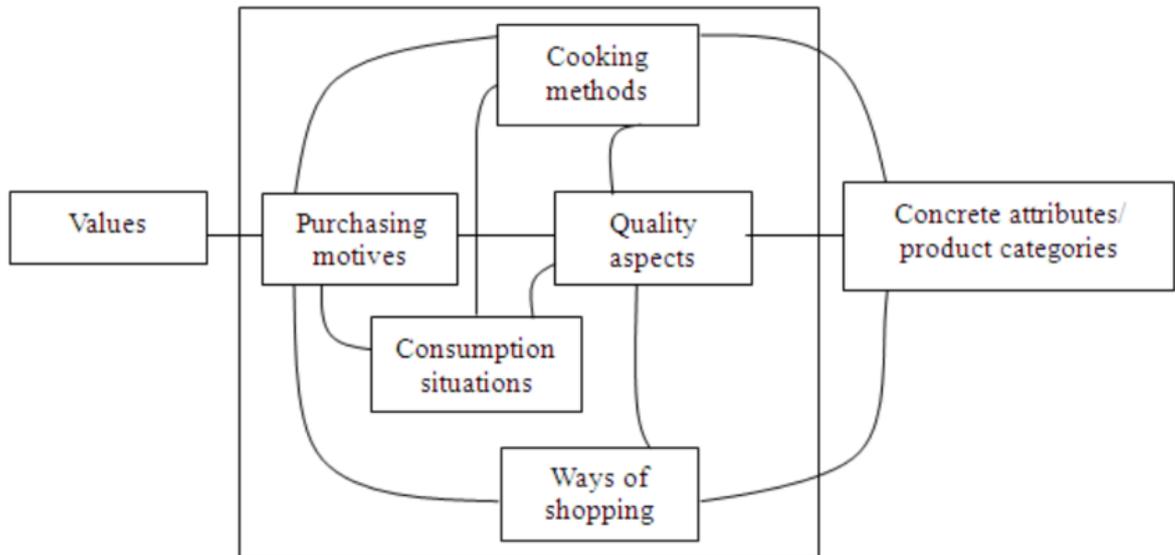
Regarding the motivators of food consumption, Webb (1995) argues that the satisfaction of needs is a steady motivator to humans. As already hinted in the introduction, humans eat to satisfy a physiological need, which is hunger. When thinking about the Maslow Pyramid of Needs, one would assume that with food consumption, only the first layer of needs (the physiological aspect) is fulfilled (Maslow, 1943). However, this need does not explain what to eat, how to prepare it, with whom to eat nor in what social circumstance the food is consumed (Webb, 1995). According to Riches (1999), food is a central part of one's life. It is not only a basic (physiological) need, but it also has several other connotations one would not expect (Riches, 1999).

Perater et al (2019), in research of students, who have aimed to identify which needs of an amateur chef can be fulfilled by cooking, hints that further needs can be fulfilled. On the one hand side the students made usage of existing research, and on the other side, they investigated their own motivational factors when cooking. Their research states that especially social needs but also esteem and self-realization needs can be supported by cooking. It was identified that cooking enables individuals to have the feeling of control over their lives, especially for those who have an increased interest in culinary. Moreover, their research assumes that cooking also satisfies belongingness needs since it strengthens social and ethical belongingness. In addition to that, it is assumed that certain cooking skills enhance social regard but also help amateur chefs to express their creativity, which is part of self-realization needs. Since cooking can be seen as part of the food consumption process, this research gives an interesting aspect which could be applied for the explanation of motivators of general food consumption (Perater et al, 2019).

## The food-related-lifestyle (FRL) instrument

As already hinted, lifestyle research is very important to marketers (Szwacka-Mokrzycka, 2015; Kröber-Riel & Gröppel-Klein, 2013). This applies also to food-related lifestyle research (Bruhn, 2007). Since the 1990s, the food-related lifestyle (FRL) instrument has been frequently used by marketers to segment societies for their food marketing activities and to predict food-related behavior. In particular, the prediction of the differences of how individuals view food and drink as a possibility for the perpetuation of their basic life values. The FRL instrument is based on a 69-item questionnaire survey with several sub-questions that measure lifestyle grouped into five core areas and has been successfully used for several case studies already, quite often to make cross-cultural assumptions. (Scholderer, Brunsø & Grunert, 2004). The core areas are (1) Means of shopping, (2) Cooking methods, (3) Quality aspects, (4) Consumption situations, and (5) Purchasing motives, as depicted in figure 2 (Grunert et al, 2001; Bruhn, 2007).

FIGURE 2: FOOD RELATED LIFESTYLE INSTRUMENT



Source: Grunert et al, 2001; Bruhn, 2007

Several food consumption lifestyles have been identified with the help of the FRL instrument. Those depend on the research focus. Most of the conducted research that made use of the FRL go into the direction of sustainable food consumption, food preparation and corresponding time, meat and organic food consumption, product innovativeness, and functionality. For each of these research topics, different lifestyles have been defined. However, quite a few of them are overlapping (Scholderer, Brunsø & Grunert, 2004). To illustrate how the FRL can be applied, the author of this thesis will introduce two studies and the relative food consumption lifestyle segments that were identified by it.

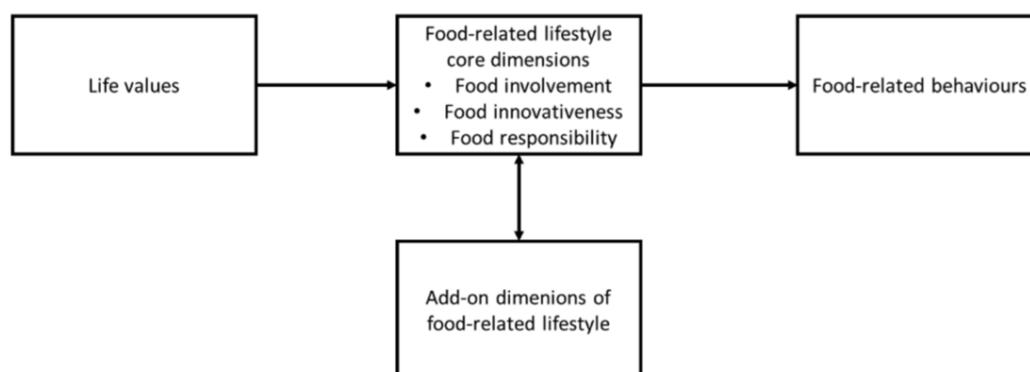
In a study, Casini et al (2019) aimed to identify food consumption lifestyles according to the preferences of time spend on food preparation. The study distinguished between quickies, foodies and those who are indifferent. The “quickies” are willing to pay a premium for saving time; the ‘foodies’, who enjoy cooking and spending a lot of time on food consumption; and those that are ‘indifferent’, for whom the time needed to prepare meals is not a factor of choice (Casini et al, 2019).

Another study concerned the segmentation of European food consumers. Grunert et al (2001) identified five different consumer groups. First, the (1) adventurous segment has a high demand for qualitative items. Moreover, adventurous food consumers enjoy the preparation time in the kitchen but also exploring new products and meals. In general, one can say that they get motivated by the social and self-expressing aspects of food consumption. The (2) conservatives also have a high demand for qualitative food; however, they are not keen on the trial of innovative

food products and meals and generally have a conservative approach to cooking. The (3) uninvolved customer segment shows no interest in anything related to food consumption but puts a lot of focus on food that is convenient and has the tendency to snack a lot. Quite similar, the (4) careless consumer segment does have little interest in food consumption but shows interest in the introduction of new products and snacks. Lastly, the (5) rational segment also do not possess a special interest in anything food-related but do have a mentionable interest in health and product information (Grunert et al, 2001).

Due to the high number of sub-questions and the general time and effort that must be invested, lately researchers attempted to develop more concise instruments for predicting food-related behavior more easily. For example, Grunert (2020) suggests that meaning of food falls under two broad categories: the degree of food involvement and the degree of food innovativeness. The degree of food involvement relates to the importance people put on in their food decisions throughout their daily life. Food innovativeness is about the interest and openness towards new food products. In other words, the creativity people put in their food decisions. Brunso et. al. (2021) extended the model by adding another dimension to the previously described two, namely food consumption in combination with responsibility. This addition addresses the lately increased interest in sustainability and general ethical issues and to what degree people include that in their food decisions. The authors suggest that the framework can be extended and adjusted by add-on dimensions that fit to the context of the given research. As depicted in Figure 3, the three dimensions (food involvement, degree of food innovativeness and responsibility) should act as a missing link between life values and food-related behavior and significantly simplify the identification of segments. Another mentioned advantage is that the instrument prevents the segments from overlapping. (Grunert, 2020; Bronso et al, 2021).

FIGURE 3: MODULAR FOOD RELATED LIFESTYLE INSTRUMENT



Source: Brunsø et al, 2021

The previously mentioned food consumption lifestyles instruments, food lifestyle segments as well as the overall literature allows to make the following assumptions about food consumption lifestyles: The role food has on people's life differs from person to person. Although the physiological need of eating concerns every human, not everyone is interested in food to the same degree. In some eyes food may just be a necessity, in others it is one of the most significant aspects of human's daily life. Those with a high interest do not bother spending financial and timely resources on the procurement, preparation and especially the consumption of food. Some of them eat at home, some have the preference of dining out. Besides not being equally involved with food, humans also differ in the reasons for the involvement with food. As already mentioned in the part concerning individual motivators, there are people who use food for the satisfaction of stability and safety needs and people who can creatively express themselves by the help of food and therefore satisfy their self-fulfillment needs. Thus, one can also combine food consumption lifestyles with the Motivation – Need theory of Maslow (Brunso et al, 2021; Perater et al, 2019).

#### **2.1.5 Food as a social currency**

Following the assumption that food is often used to satisfy one's self-expression needs, one can further particularize on that (Brunso et al, 2021). As already stated, food is an identity shaper, depicts one's values and is also a projection of one's personality. Especially the Z Generation uses food as a social currency since the digital world and social media enables a perfect exhibition of what one eats. However, before amplifying on that, one should also highlight the development of the foodie movement, which is largely based on the values of the Y Generation, the millennials (Wheeler, 2017).

The term foodie has many definitions. This is because the concept of foodies has developed throughout the time and researchers are nowadays disagreeing on who accounts as a foodie. Baumann and Johnston (2010), authors of the book *Foodies: Democracy and Distinction in the Gourmet Foodscape*, mention that the "foodie" culture is often characterized by the upper middle class, especially in the 1970s and 1980s. The terms "Foodies" and "Gourmets" were used simultaneously for people who love to eat and have no problem with spending more money on food consumption than usual. Very often the terms related to the French cuisine, frequent restaurant visits and other aspects that are considered as noble (Baumann & Johnston, 2010). However, within the last two decades, the term foodie has more developed into the counterpoint of a food snob, into someone who is searching for authenticity in food experiences and values every aspect of food culture (De Solier, 2013). Millennials, who did a great part making the foodie culture a widespread phenomenon, see food consumption as a form of consumption of experiences, which can be used as a form of social currency. A currency they can use for new culinary learnings during discussions, table conversations and to highlight on what makes one's

identity. Millennials often are foodies that work on their culinary skills, from adequate wine knowledge to cooking techniques. Their interest is high, and they do not hesitate to let others know. They often consider environmental aspects in their food choice and tend to feel reassured because of that (Sedacca, 2016).

Baumann & Johnston (2010), assume that foodies can be separated into two groups. Those who value authentic food experiences and those who are eagerly trying to fit in a lifestyle or social group and use food as an identifier for reflecting intellectual activity (Baumann & Johnson, 2010). Already in 1984, Bar and Levy stated that there are six foodie types and in 2013, Sloan modernized this approach by developing the following categories: 1) Fans of Foreign Food; 2) Enthusiastic Chefs; 3) Gourmet Foodies; 4) Organic Foodies; 5) Healthy Foodies and finally 6) Restaurant foodies, as depicted in Table 1 (Bar & Levy, 1984; Sloan, 2013). Independent of the foodie type, something that has become quite common among foodies is taking pictures of one's food. Especially, as pointed out in the prior section, the foodies among Generation Z. The smartphone generation has made the foodie practice into a mainstream trend. Photos capturing one's food have become a very important aspect of many people's online life (Bekar, Kiliç & Yozukmaz, 2017). According to Holmberg (2017), this aspect has symbolic value, since this generation uses pictures shared on social media to achieve self-presentational goals. To be exact, it allows to generate ideal selves (Holmberg, 2017).

TABLE 1: FOODIE GROUPS

Foodie Type	Description
Fans of Foreign Food	This group covers 30% of all the foodies. These foodies are keen on Italian, Mexican, Asian, Chinese, Spanish, Mediterranean and Indian food.
Enthusiastic Chefs	Although most of the foodies are described as consumers rather than producers, most of them are very enthusiastic about trying new recipes, too.
Gourmet Foodies	Gourmet Foodies are interested in upper-class cuisine and love to visit restaurants that have been rewarded by gourmet guides.
Organic Foodies	These foodies prefer foodstuff that is sustainable, regionally produced, and organic.
Healthy Foodies	Their priorities are calories and nutritional values of food.
Restaurant Foodies	They want to experience new food and beverages in all the restaurants they visit. The restaurants do not necessarily have to be upper-scale restaurants and can be in several categories.

Source: Sloan, 2013

## The social aspect of eating

A big part of the formation of food culture is the social aspect. Food consumption can act as a satisfier of social needs and connect people. It may connect friends, family but also individuals without any shared interest. It does not only stimulate cohesion, but it also shapes cultural identity. Food may be shared among everybody, however the shared food consumption within one's family does have a significant effect on one's personality and one's general development (Herman et al, 2019). Evidently, family can be accounted as a distinctive social group that greatly influences a human's development. Family is the first social group one belongs to. It is responsible for the process of initial socialization, setting the ground for adequate human behavior, perception, thinking, and an understanding of the social norms generally applied in a society. The food individuals consume during their childhood also significantly influences their future food choice and food consumption lifestyle. This can be said because, with the food that is consumed at one's upbringing, religious, economic, educational, and ethnic experiences are collected that are later simulated. Eating something that reminds one about one's childhood very often stipulates nostalgia, which people usually enjoy feeling and often actively search for in eating experiences. Eating together further shapes the relationships within the family and shapes a person's attitude towards others that is particularly important at a later stage of one's life. As already mentioned in the section where food culture is defined, a certain type of food culture is also lived within families, and therefore, the one that is lived within one's childhood contributes significantly to those living as an adult (Veselá & Grebenová, 2010; Paponnet-Cantat, 2003).

In a successful, sociable meal, everybody must be conformed to behave and hold conversations that fit the group's common expectations and interests. Due to this expectancy, people tend to eat differently when being around another human being, as if they would when one is eating alone. Humans try to imitate the behavior of those with whom the meal is shared, especially about the quality and quantity that is consumed but also try to make use of norms that are generally expected. Hence food consumption behavior serves as a part of the public image (Mummendays, 1997). Moreover, the accordance to cultural norms that is formed by consuming food together gives an example of strengthening cultural identity and this is what stipulates cohesion. The formed connections as well as relationships that are made while eating bring joy to humans. A pleasant and successful meal brings satisfaction and happiness to people because people with whom the food is shared, automatically appear friendly but also trustworthy. In addition to that one must mention that when being in a group, food often appears to be of better taste leading to increased and more intense consumption patterns (Higgs & Thomas, 2016; Colaizzo-Anas, 2014)

### 2.1.6 Food lifestyle trends of the last decade

According to Mehmeti & Xhouxhi, (2014), broad trends can be identified in people's lifestyles that also contribute towards society's changing food consumption practices. When a lifestyle is lived by a great number of people it turns into a lifestyle trend (Mehmeti & Xhouxhi, 2014). Generally, trends are used to describe developments in several contexts. Since these developments often have a different severity, trends also possess different scopes. According to Deloitte (2020) there are four categories of trends: 1) Mega Trends, 2) Consumer Trends, 3) Market Trends and 4) Technological Trends. However, in this thesis the author is mainly focusing on consumer trends. According to changes in values, consumer trends develop, and these come with new behavioral patterns that remain over time. Sustainability is a grand example of consumer trend which mirrors people's values and the corresponding lifestyles (Deloitte, 2020).

Since consumer trends are directly connected with the consumption of products they are also connected with the generation of money and therefore important to several stakeholders. Another reason why consumer trends are of importance to stakeholder is that they show the effect of triggering events on our society. Understanding trends therefore helps businesses to adapt to change. Resulting from this description, one can therefore refer to food lifestyle trends as an important aspect of food culture because here the changes in the market and the societies lifestyles are cumulated and sensible. Additionally, predictions of future food consumption patterns are also possible by identifying trends, which makes trends a valuable tool (Deloitte, 2020).

Research deals with food trends differently. Some concentrate on specific trends within food categories that are seen as fads by others. Others focus on broad consumer trends based on lifestyles that allow making a prediction about consumption behavior changes (Pfadenauser, 2004). Within the last decades, several trends in food consumption behavior were identified. As already mentioned, quite often, these changes in society's food consumption patterns are linked to general lifestyle trends that manifest in people having a certain form of consumption behavior (Oginsky et al, 2016). Tudoran et al (2012) differentiate between five broad food consumption trends: Health, Convenience, Pleasure, Sustainability and Authenticity. Quite similar, a 2014 article by Mehmeti & Xhouxhi, concludes that due to several developments in societies, four major food trends will influence consumers food consumption: Health, Organic food products & Sustainability, Quality & Indulgence, and finally, Convenience. Based on the two the two classifications the case study will elaborate on four major food lifestyle trends: 1) Sustainability, 2) Health, 3) Quality and Pleasure and 4) Convenience (Tudoran et al, 2012; Mehmeti & Xhouxhi, 2014).

## Trend 1: Health

As already mentioned, the trend of a healthier food consumption is observable around the world, however especially noticeable in terms of profits in the western hemisphere (Nunes et al, 2020). This is particularly observable in people's food consumption patterns. The demand for organic, functional, and allergy-friendly products has increased to a higher degree than current food consumption. The reason for that is that healthier food products satisfy several needs as a traditional food consumption would. It also brings benefit to people's social and environmental surroundings, at least as a certain degree. A few years ago, humans became aware that a more health-orientated nutrition can prevent one from suffering from obesity or several other diseases. Nowadays, individuals incorporate health into their daily life since it is considered as some sort of wellness. They prefer healthier food alternatives since it corresponds to their values of living a long and healthy life. Therefore, the health and wellness food lifestyle has led to global retail earnings above 700 Billion USD in 2017 and has since then led the segment to become one of the most profitable segments in the F&B industry (Tudoran et al, 2012; Nunes et al, 2019).

According to Géci et al (2019), the development can be traced back to globalization, urbanization and the economic growth that has happened within these societies (Géci et al, 2019). The World Health Organization (WHO) states that a healthy food consumption consists out of vegetables and fruits, a low sugar and fat intake, whole grains, and the goal of not trespassing one's optimal calorie intake that corresponds with one's energy expenditure (WHO, 2018).

Another thing that is considered as a significant aspect of a healthy diet is low alcohol consumption, the abdication of animal products, and a high amount of protein. To support health benefits, functional foods have been introduced by manufacturers that have become increasingly popular lately. Manufacturers of functional foods claim that the products are enriched by ingredients that enhance health benefits to increase individual's life expectancy and to minimize the risks of several diseases, such as obesity and diabetes, that could usually be accompanied by typical unhealthy food stuff (Géci et al, 2019; Cena & Calder, 2019). Another area that is often researched in combination with consumers' food health concerns is food safety issues. Food safety concerns cover the consumers' ability to understand where one's food comes from, the ingredients it is made off and general knowledge on the food products production chain. These safety concerns have accelerated by epidemic crisis, such as the "mad cow" disease, which has led to an increase in individuals' food safety awareness (Bjørndal et al., 2014). A more health-conscious food consumption seems to have contributed to longevity in western countries. However, there is still a high number of people who simply have no access to healthy food products or do not have sufficient education on the negative effect food can have on one's health. At the

same time, governments and medical institutions around the world invest in initiatives promoting health awareness and healthy eating habits. This suggests further increase and spread of the trend (Vasileska & Rechkoska, 2012).

### *Trend 2: Sustainability*

Consumers got used to having access to a great variety of food all year round. Even though some products may be out of season at a given location, they are delivered from elsewhere. This consumption practice comes with several negative consequences. Climate change, social and financial inequalities among populations, shrinking biodiversity, and diminishing resources are just a few to name. Quite often, these negative impacts are ignored or even neglected by consumers, however, there is an increasing number of people that pay attention to their food consumption patterns to act more sustainable. There are a few factors that contribute to the rise of sustainable food consumption (Krystallies et al, 2011), such as:

- a. growing sale numbers of organic products
- b. development of alternative channels for regional food products
- c. the foundation of organizations that support sustainable consumption e.g., slow food
- d. brands that aim a sustainable market positioning
- e. high media coverage on negative food consumption patterns

(Krystallies et al, 2011; Tudoran et al, 2012)

An informed/conscious food consumer puts effort into an adequate implementation of sustainable food consumption patterns but also food production patterns to support the protection of natural resources. One can make sustainability-conscious food choices on an everyday basis that include a food product's origin, the manner of production, and the producer itself. As mentioned, regional food products have an increasing importance in the sustainable food consumption debate. To a significant part, this is also due to ethnocentrically consumer behavior, however to a larger part, it is about consumers' concerns about the effect food production can have on climate change (Bjørndal et al, 2014). According to an article by Grunert et al (2019) climate change is one of the biggest challenges of this century which has led to individuals increasing willingness to spend more money on local products that have not crossed the entire planet and therefore possess a low carbon footprint. Apart from the food products place of origin another topic that has gained a lot of interest is meat and fish production and consequently to that also its consumption (Grunert et al, 2019). An increasing number of individuals has developed an awareness of meat production's as well as fishing's negative impact on the environment and therefore completely or at least partly cut off one's diet. As a result, a plant-based diet is the environmental friendliest among researchers and therefore is also followed by an increasing number of people (Pocol et al, 2020).

At the beginning of the millennium, some researchers were quite critical about the longevity of the sustainable food trend, in particular the production and consumption of organic products. They argued that there would simply not be enough quantity to meet the projected global food demand by the year 2050 and will therefore increasingly be neglected by food manufacturers (Mehmety & Xhouxhi, 2014). About 20 years into the millennium, it is not evident that the trend has diminishing power, especially not in developed countries where the trend is particularly noticeable in general. One also must mention that the sustainable food consumption trend comes to a great part from young people's lifestyles, to whom it has become a value system to live by. This is since young people have the feeling that they are the generation that must act towards the prevention from serious environmental issues. Sustainability therefore has become a cultural value that is increasingly noticeable in food lifestyle patterns (Rana & Paul, 2017).

### Trend 3: Convenience

The food trend convenience has been discussed by several businesses and researchers who are trying to understand consumers food preferences around the globe where an increasing interest in previously manufactured food products is sensible. According to several studies of Deloitte, convenience is one of the most important lifestyle trends regarding people's food consumption. In general, it is said that convenience in food brings one's life to more ease. Deloitte has identified four major drivers of more convenient food consumption: 1) busier lifestyles and increasing incomes; 2) decreasing household sizes, 3) urbanization and 4) an aging population. A preference in convenience in coherence with food consumption is therefore observable within various circumstances and there are several factors that contribute to this development. (Deloitte, 2019). According to Darian & Cohen (1995), convenience in combination with food consumption can be analyzed among two categories. First, the reduction of effort and secondly the phase in which the reduction of effort occurs. The phase in which the reduction of effort occurs could either be at home during the food preparation, during the food choice process, the purchasing process and finally also the consumption of food. One can therefore say that the term convenience in combination with food consumption may include several distinctive factors that could be discussed in detail, this thesis however will only highlight a few to demonstrate the severity of the trend to the reader (Darian & Cohen, 1995; Botonaki, Natos & Mattas, 2007)

First, there has been a mentionable increase in the food consumption but also production possibilities outside of ones homeplace. One of the biggest facilitators of this development are technological advances like digital media and the internet that has contributed to a high degree to the expansion of food delivery platforms but also online supermarkets. The number of food delivery apps has increased significantly in recent years and are an integral part of many people's lives. Online grocery markets provide the possibility to order food online from home and this is something that is valued by many, especially those who are keen on saving time. The wish for

saving time while eating is another big contributor to the development of the convenience trend (Ma, Webb & Schwartz, 2021).

One also must mention that the convenience trend may be one of the biggest disruptive factors with regards to a healthy food consumption, however convenience does not always imply that food necessarily must be unhealthy. D'Ángelo, Gloinson & Guthrie (2020) even suggest that convenient online shopping acts as a double-edged sword regarding healthiness in people food consumption. It can drive both, healthy and unhealthy food consumption because on one side it offers accessibility to healthy food options and on the other side there could also be a reluctance among individuals to buy healthy food stuff online. Moreover, online marketing could also be an allurements to buy less healthy products. Although research is still limited in the field of convenient food consumption, researchers are rather supporting the argument that convenient food consumption, which is often associated with consumption outside of one's home, rather has the tendency to be unhealthy. The popularity in one trend therefore does not imply that another trend is not popular as well (d'Ángelo, Gloinson & Guthrie, 2020).

According to an article by Nettle (2019), the trend of convenient food is increasingly intermingled with the quality food trend that is introduced in the next paragraph. Especially younger generations that are conscious about their time, however, are also keen on qualitative food experiences. They are increasingly interested in "premium-convenience", food that comes easy, is highly qualitative and in the best case also healthy and environmentally friendly. Restaurants but also supermarkets convenient food offer therefore has many criteria of dietary trends to fulfil, ranging from vegan food alternatives to gluten free products and protein dense variations (Nettle, 2019). Thus, these different food consumption lifestyles and corresponding preferences, as stated in the introduction, make food consumption a complex matter.

#### Trend 4: Quality/Pleasure

Pleasure in eating is broad phenomenon/trend that is observable throughout several food lifestyles. The interest in food has increased drastically in recent years (Tarr, 2016). As pointed out in a previous section, people have started to see food consumption as a form of lifestyle expression. For instance, the previously introduced sustainability lifestyle lived by several people goes hand in hand with their food consumption behaviour. However, one has to say that food consumption itself has become a lifestyle to many. Put alternatively, there are individuals with a food culture that makes them see food consumption as an integral part of their life, if not the most important one. For them, food relates to indulgence, which very often must be of a certain quality (Tarr, 2016).

Quite often these treats are seen as an unhealthy reward as for instance an alcoholic beverage, a dessert or something high in carbs. Apart from that one can also connect indulgence with experiences like events, the enjoyment of celebrations or a certain feeling. However, for some, indulgence may also relate to quality and authenticity or even healthy and sustainable food products, however quality will be further touched upon in a separate paragraph. According to Wilson, Steingoltz & Picciola (2018) the indulgence trend often can be observed with other trends conjointly: 1) the nostalgia trend; 2) fusion and innovation; 3) portion control; 4) healthy twists. Indulgence therefore is a very broad term that can relate to various preferences (Wilson, Steingoltz & Picciola, 2018). Mehmeti & Xhouxhi (2014) state that the indulgence trend is directly related with pleasure and is promised to increase. Although there is the increasing tendency in more conscious eating behaviors observable, the authors argue that individuals will always permit themselves to indulge something. This is also the case for the younger generation, which quite often has a rather pessimistic worldview. The two authors further mention the trend of premium quality products that will also further increase. This is also the case according to Tuderan et al, (2012) who state that consumers will show continuously interest in high quality foods and that people's enjoyment of dining experiences is likely to increase (Mehmeti & Xhouxhi, 2014; Tuderan et al, 2012).

However, in research it is also discussed what "quality in food" really is. To sum it up, food quality consists out of several attributes of a food product the consumer sees as acceptable. Of course, these vary from person to person. These attributes often are 1) Appearance, 2) Flavour, 3) Nutritional content and 4) Sustainable production. As one can see, quality in food also is co-dependent to other lifestyle trends (Petrescu, Vermeir & Petrescu-Mag, 2020).

## 2.2 THE IMPACT OF A CRISIS ON FOOD LIFESTYLES

### 2.2.1 Overview on the versatility of a crisis

According to Milasinovic & Kesetovic (2008), the term crisis is used in every day's speech. In private conversations it often describes personal matters or personal problems, however it can also be used in a different context. Quite often it is used to describe sudden situations businesses or governments find themselves in and sometimes they even concern entire societies. Although the term does not have a fixed interpretation, one can say that a crisis is always connected with potential negative consequences. Focusing on the societal aspect, the term is often described as a situation that is triggered by events that cannot be controlled and may be accounted as a danger for society, for instance health and environmental damage. On a societal level there exist a broad number of crises, however the most common ones referred to are environmental crisis and financial crisis. In general, a crisis is often researched in combination with various fields of scientific backgrounds since very often it is considered to a turning point for the status quo which comes along with a high degree of uncertainty. Among others, these scientific backgrounds are economic, social, political, or even anthropological. Besides being a threat to the status quo a crisis can also harms a society's values and norms, which may lead to critical decisions (Milasinovic & Kesetovic, 2008).

According to Rosenthal, Boin & Comfort (2001), the three key elements of a crisis are threat, urgency, and uncertainty. Within the last century, crisis with a strong magnitude in these elements have increased. Boin (2009) states that a crisis also varies in length, intensity, and impact on societies. However, one can differentiate between two kinds of crisis. A traditional one, that has a clear beginning and end and a transboundary crisis, which cannot be attributed to a certain time frame. Traditional crisis is often referred to in a business or political context, as for example insolvency and corruption. A transboundary crisis, which may also refer to as a mega crisis, may cross geographical borders and affect various societies. Thereby threatening cities, regions, countries, or even continents. The name is also used for crisis which affects various functional systems and industries. Within some industries it may be felt years after the initial crisis. A good example would be the 9/11 crisis, which has since then affected various countries and societies. The SARS epidemic 2002/2003 is another example since it not only spread throughout various Chinese regions but also affected the tourism industry and many enterprises in the public and non-public sector. The financial crisis also can be named as such. Due to the diverse nature of crisis, it is hard to differentiate between phases that can be applied for each crisis. Every crisis is unique. (Rosenthal, Boin & Comfort, 2001; Boin, 2009)

### 2.2.2 Crises and Values

According to Hofstede (2001) and Mazurek (2021), different national cultures handle crisis or new situations differently. Hofstede (2001) states that people's behavior depends on the approach of the entire society the person is part of. To be exact, Hofstede uses five dimensions of culture that explain the behavior of societies. The five dimensions are 1) Power Distance; 2) Uncertainty Avoidance; 3) Individualism vs. Collectivism; 4) Masculinity vs. Femininity and finally 5) Long-term vs. Short-term orientation. With regards to a crisis, the most interesting cultural dimension to look at is 2) Uncertainty Avoidance, which relates to the fear of uncertain situations. This very much influences the decisions made in a society. Moreover, the degree of uncertainty avoidance also hints to the speed and insensitivity of changes in a society. However also 3) Individualism vs. Collectivism is an important construct in a crisis, because it shows in how far members of a society fight for a common goal or put their individual wellbeing in the foreground (Hofstede, 2001; Mazurek, 2021). This behavior was very much observable during the first stages the COVID-19 pandemic. The crisis put a lot of pressure on individuals, but the goal of ending the pandemic made people do a lot of collective efforts, as for example the reduction of contacts (Waters et al, 2021). However, Guthrie (2014) argues that cultural values could also change during a crisis, due to its state of exception (Guthrie, 2014).

Regarding values on a rather individual level, theory shows that they tend to intensify as a result to such a dramatic event. This was observable within an EY study by Marcie Merriman (2020), focusing on the COVID-19 crisis. In the case of a crisis these changed values are often combined with flexibility. An example for that would be that within the corona crisis, the home office rule has changed the need for things like flexible childcare, flexible working hours or new morning routines. On the other side, criteria like predictability, a higher degree of personalization and authenticity have increased because individuals aim to keep things in order and want to know that they matter (Merriman 2020; Hofstede, 2001; Mazurek, 2021; Guthrie, 2014;).

According to Vermonte et al (2022), a popular theory to check the insensitivity of impact a crisis may have on a society is the theory of needs. Since it is often used to describe general customer behavior in various situations, it is also applicable for times where stress and anxiety levels are high and has therefore often been implemented in combination with a crisis (Vermonte et al, 2022). In the first phase of a crisis, it is said that higher order needs are more volatile than basic needs. This means that humans are rather reluctant to buy luxury items and pursue self-fulfilling actions, but do not relinquish to buy essential goods. This reluctance however decreases over time. This was particularly observable during the global financial crisis in the first decade of the new millennium. As soon as the fulfillment of one's basic needs were guaranteed, the consumers started to show an increasing interest in fulfilling their upper order needs again (Loxton et al, 2020). In the EY article by Merriman (2020), she states that humans most basic needs, such as

nourishment and shelter but also needs regarding safety are achieved with the help of financial security and emotional stability. It is said that the fulfilment of these needs requires three conditions: 1) Order; 2) Predictability and 3) Control. Under normal conditions these conditions are fulfilled by employment, health, and mental wellbeing. Within a crisis, those conditions are disrupted and therefore lead to uncertainty with regards to the fulfilment of ones most basic needs and security needs (Merriman, 2020).

### Impact of a crisis on behavior

Within a crisis, humans' behavior is varied from normal situations. A common model used to understand consumers is the Stimulus-Organism-Response (SOR) Model, a model which was introduced by Pavlov in 1929. The basic idea behind the SOR Model is that certain stimuli are consciously or unconsciously processed in one's organism, which leads to concrete responses. In the day-to-day life, these stimuli are marketing variables such as the 4 P's (Product, Place, Price, Promotion) but also environmental stimuli. These are primarily formed by cultural, economic, and social forces (Kröber-Riel & Gröppel-Klein, 2013). Within a crisis, these environmental stimuli change and therefore also the consumers behavior. In the past, several researchers have applied the SOR Model for crisis. Put in very simple terms – the behavioral changes induced by a crisis are influenced by the stimulus of threat. The corresponding behavioral response are actions that minimize or avoid the bad outcomes of the threat (Wahab, Menon & Szalacha, 2008). A widespread crisis therefore creates an environment of psychological fear within a society that leads to certain reactions that vary throughout the different stages of a crisis (Pandita, Mishra & Chib, 2021).

When taking a closer look on past pandemics such as Ebola, SARS, swine flu or the dengue fever, societies did not only tend to change their consumer behavior but also their health risk mitigation behavior (Branquinho et al, 2021). This is not only due to the threat itself, but also because due to macroeconomic changes, such as unemployment, recession and most prominently uncertainty. Among the most frequent changes of consumer behavior, that have been witnessed during a pandemic is an increased food buying behavior, masks, sanitizers, and further products that may help surviving a total shut down. In this context, the stimuli that cause a certain behavior are information sources, which inform individuals about the above-mentioned changes and therefore transmit the feeling of threat (Goodwin et al, 2017).

Another theory that is often used to describe a society's behavior is the theory of reasoned action (TRA), which has been introduced by Fishbein and Ajzen (1975). The theory has been used in various contexts. Generally, the theory elaborates on consumers attitudes, intentions and beliefs and is particularly helpful to explain future actions. Fishbein and Ajzen suggest that behavior is the function of the intention. In "Understanding the Consumer Behavior during the COVID-19 pandemic" by Zeren (2021), the TRA is used to explain the behavior during health-

related crisis such as the previously mentioned SARS, Ebola but also the recent COVID-19 pandemic. The theory suggests that behavior results from one's intention, which is influenced by attitudes but also subjective norm. The latter is the perception of others about actions, to be exact on how one should or should not perform. In other words, the approval or disapproval of ones loved ones. Attitude, however, is about the own positive or negative favor of one's behavior (Zeren, 2021). According to Keefe et al (2019), health related behavior is the result of deliberation and planning. In the case of a health crisis, the intention of individuals helps to act preventive as the avoidance of shaking hands or covering the mouth. However, the unusual purchases at the beginning of a pandemic, such as panic buying cannot be explained with the help of the TRA. This is because in a state of panic, people do not act rational (Keefe et al, 2019).

### **2.2.3 Altered food consumption during times of uncertainty**

As already mentioned above, a crisis can have several faces, which all have different impacts on societies. Therefore, the impact a crisis may have on food consumption also varies from crisis to crisis (Basev, 2014). Within, but also after a crisis, societies struggle differently. This depends on the nature of the crisis but also on the given macroeconomic conditions in countries. The research but also conversations about food consumption after a crisis alters drastically dependent on these two factors. For instance, the concerns and research interests about food consumption and food culture in southeast Asia after the 2004 tsunami catastrophe was totally different to those during the COVID-19 crisis in Europe. The 2004 tsunamis did not only kill hundred-thousands of civilians, but it also led to the homelessness of millions and the destruction of entire (food) infrastructures. The concern therefore was more about the security of food systems than about behavioral changes and food culture (Webb, 2005). To comply with this thesis topic, only those crises that were connected to various behavioral changes and food culture, but also make sense to compare to the COVID-19 crisis are further elaborated on.

According to Murphy et al (2021) one cannot directly compare the impact the COVID-19 crisis had on food behavior with those of prior crisis. This is because the scope and versatility of the COVID-19 crisis was unique. It has had a drastic impact on many people's life, since there were various phases of lockdowns, where people had various kind of emotions, new challenges, and situations. There has never been a crisis which forced people to stay at their houses for a longer period and the closure of restaurants was a completely new situation to many societies (Murphy et al, 2021). However, to make assumptions about the impact of the COVID-19 crisis on food behavior, one can compare it with situations of similar emotional state or phases of a crisis that have been seen before (Basev, 2014). According to Hassen, El Bilali & Allahyari (2020), the COVID-19 crisis has led to drastic changes in one's day to day life, it also had a major impact on psychological well-being due to negative emotions such as panic, boredom, and stress (Hassen,

El Bilali & Allahyari, 2020). Gaining an understanding on how these states can affect food consumption during a crisis and the learnings of past crises may contribute to the comprehension that the COVID-19 crisis may influence a societies food consumption in the long run.

### The Stockpiling Phenomenon

As already mentioned, within a variety of crisis, such as natural disasters or other humanitarian issues, irrational buying behavior has been widely reported (Vermonte et al, 2020). Although it was a novelty to many during the COVID-19 crisis, stockpiling is common for people facing uncertainty or dangerous situations, such as natural disasters (Pan et al, 2020). This type of behavior is primarily induced by irrational factors, such as fear, lack of information or time scarcity that prevent people from careful judgements (Dresner et al, 2020). According to Deci and Ryan (2008), one can connect stockpiling with three needs: 1) Autonomy, 2) Relatedness and 3) Competence. 1) Autonomy relates to the want of people to have a continuous choice in their doing. According to Taylor (2020), this choice makes people feel to have a certain degree of control in a completely uncontrollable situation. This statement can be compared to the previously cited EY study by Merimann (2020), which focusses on the general needs within a crisis which states that gaining back control is of high importance to humans within a crisis. 2) Relatedness in this sense means that it makes people feel to do the right thing, since stockpiling is done by many people. This behavior that corresponds to that need is often referred to as "herd-mentality, where people decide according to the behavior of others. Finally, 3) Competence relates to the imagination that one's purchases lead to superiority, which means to feel smarter and safer than others. (Deci & Ryan, 2008; Taylor; 2020; Merimann, 2020)

Interestingly, stockpiling behavior is an example of panic buying behavior and has been equally observed in countries with a well-functioning economy and in countries with a developing economy (Russo et al, 2021). However, panic buying in developed countries is rather based on emotional cues such as mentioned above and in developing countries it is rather based on more rational factors such as hyperinflation and real scarcity. Independent of the economic state of a society, the panic buying behavior leads to various challenges for communities, however Ahmadi et al (2020) conclude that this behavior will be observed again throughout future crises (Ahmadi et al, 2020; Russo et al, 2021).

## Periods of Stress

Gonzalez & Miranda-Massari (2014) describe stress as the reaction of the body to the new (or arising) status quo due to a stimulus. In general, stress is seen in many different situations such as conflicts, pressures, and various social situations. Another accelerator of stress is uncertainty, which is an emotional state that comes with a crisis. Periods of stress, therefore, have been felt by humans within crisis ever since (Gonzalez & Miranda-Massari, 2014). The uncertainty and the corresponding stress have an influence on people's needs and behaviors, which again impacts people's eating patterns within a crisis (Koffman et al, 2020). According to Sánchez-Sánchez et al (2021), perceived stress increases the overall food intake, however especially in foods that are considered as unhealthy. Such comfort foods act as a coping strategy and often consist of a high amount of sugar or fats and is high in calories. People also tend to increase their snacking behavior since they have the feeling the indulgence keeps them calm (Sánchez-Sánchez et al, 2021).

## Periods of Boredom

Another situation that was present within the most recent COVID-19 pandemic is boredom. Quite similar as in situations of stress, boredom alters the way of humans eat since it gives the feeling of being a distraction of one's present situation (Hassen, El Bilali & Allahyari, 2020). Boredom is an emotion that is connected to the feeling of being dissatisfied and unchallenged. Quite often, people who are bored even feel the lack of personal purpose. The theory on this behavior was established in the objective self-awareness theory by Duval and Wicklund (1972), which assumes that individuals increase their awareness of discrepancies between the present and ideal self in situations where oneself is the focus of attention, which is the case when one is bored. In such situations where people are unable to do something that appears meaningful to them, they are more likely to reduce or avoid the self-focus which often is done by eating or other actions (Duval and Wicklund, 1972). Depending on this awareness but also one's personality traits, boredom could turn into creativity, which in the case of eating would be the experimenting with new recipes or new flavors. However, boredom could also lead to an increased snacking behavior as in situations of stress or a general higher valuation of food consumption. Similar as during the COVID-19 crisis, the latter was the case during several war attacks in Kabul within the last decade, where for western expats, who were not allowed to leave the guest-house, the daily food gatherings were the highlight of that time (De Lauri, 2014).

## 2.2.4 Food consumption lifestyle after a crisis

After elaborating on the food consumption patterns that are frequently observed within a crisis, the following section provides an overview of the long-term influence crises had on the food culture of societies. One thing that most past crises have in common is that even as they were considered as over, they were still felt economically. This economic alteration, however, influences the food lifestyles after a crisis. In addition to that, psychological aspects or corresponding changes in lifestyle may also be factors that change one's food consumption (Russo et al, 2021).

### Financial Crisis:

One of the most recent crises in the past years has been the financial crisis in 2007/2008 which has impacted societies all over the world. The financial crisis was no one-day event, instead, it continued for a few years. As it is usual for crisis, the financial crisis hit developing countries and developed countries differently. In developing countries, the financial crisis brought a threat to the general food system with some countries struggling to feed their inhabitants (Christian 2010). In developed countries however, the effects were less drastic however also impacted life (Brinkman, 2010). As Dobrovolskij & Stukas (2013) state, the financial crisis was directly related to poverty, which again relates to bad eating habits. This statement was also supported by Basev (2014), who states that during, and directly after an economic crisis people tend to spend less money as they did before, and this also affects the food consumption lifestyles. This is since economic factors are a major part of people's decision making processes, as being thought in most economic theories such as the "Engel Curve", which shows that also in non-crisis times income drastically affects consumers food consumption. Classical economic theory also indicates that the ratio of income to food consumption decreases drastically with income. The financial crisis therefore had a bigger impact on the food consumption of low-income consumers than on those that are financially stable. (Dobrovolskij & Stukas, 2013; Basev, 2014)

According to Nielson-Stowell (2019), who summarized the long-term impacts of the financial crisis on the American food culture, low-income consumers increasingly started to buy food products that were low in price. To be exact, they also recognized the advantage of coupons, started to purchase more items that were on sale, increased the number of shopping trips, and bought large amounts of the same food product to save on quantity advantage. Regarding lifestyle changes, there are some takeaways that can be made about food consumption during the recession. First, the overall grocery store spending remained almost steady on the pre-crisis level. This is because when the economy is bad, people increase their time at home and consequently also prepare meals at home more often. In such phases, the number of family gatherings to enjoy food together at home is also increasing. On the contrary, the number of meals consumed in restaurants plummets. In America, the area after the big financial crash has been the

worst era for the restaurant industry. Although a high number of Americans turned to unhealthier products due to their cheaper nature, one cannot generalize that the financial crisis decreased the nation's health focus. In contrary, a lot of adults started to have an increasing concern about nutritional factors (Nielson-Stowell, 2019).

Another study by Theodoridou et al (2017), which focused on Greece, a country that already had major financial difficulties due to the miscarried joining to the euro-zone, also shows that consumers still tried to have a balanced diet, however, a great number of people switched to the economy range since price has a higher priority than quality (Theodoridou et al, 2017). Similar trends were detected in the UK, where the financial crisis also accelerated the wave of supermarket discounters (Montague-Jones & Mattison, 2014). Notably, as the economy improved, people were increasingly looking for premium quality labels again. Moreover, the authors add, that the crisis has led to the increased willingness to try out new food products as a way of impressing others. This culminated in a rise of healthy snacking & functional food as well as the trend of convenience food. Similar patterns happened in the restaurant sector which was coming back to life as the economies recovered (Montague-Jones & Mattison, 2014).

According to Sedacca (2016), who writes articles for the EATER magazine, even mentions that the economic crisis was responsible for the rise of the entire "foodie" generation. After the economical crash, millennials started to spend high amounts of their salary on several parts of food culture. This generation was also to a great part responsible for the recovery of the restaurant industry. According to the author several researchers were confused because they expected this generation to primarily spend less on food, however they started to spend their money in a novel way. The explanation for this behavior can be linked to the definition of the term "foodie" itself. As mentioned previously, foodies use food to express their identity. In this sense, the consumption of more qualitative food provided millennials a sense of control, a form of social currency and psychological perks (Sedacca, 2016). Baumann & Johnston (2015), claim that it is not surprising that the foodie culture had such an upturn after the crisis since especially within periods of financial inequality, privileged people turn to cultural activities (Baumann & Johnston, 2015).

#### Health crisis:

Generally, it seems interesting to compare the COVID-19 crisis with other health crisis. However, the majority of past health crisis such as the outbreak of Ebola or MERS primarily affected countries with vulnerable populations, therefore the research was rather focused on food security concerns. However, the SARS-2003 virus that spread throughout China has a few similarities which make the two crises comparable, although the scope of the crisis and therefore also the effects on food consumption were smaller in size. The SARS outbreak was the first epidemic of

the 21<sup>st</sup> century and spread over 26 countries worldwide but it was contained quite rapidly. Research shows that within the crisis, similar behaviors as during the COVID-19 pandemic were observable (Noy & Shields, 2019). Panic buying was very common and every time a region was affected, people followed the same pattern. Moreover, people resisted to go to restaurants and rather stayed at home (Qiu et al, 2018). Another issue that makes the two health crises comparable is that they were both based on the consumption of wild animals (Lau et al, 2020). As a result of this, the consumption of meat products decreased, with Beijing banning the sale of wild animals. However, not long after the epidemic, the ban was lifted, and the consumption of meat products increased again. Another development that was observable after the SARS-2003 epidemic was the increasing interest in health-related products. Especially in those regions that were directly affected, such as Hong Kong, people changed to a more health focused lifestyle (Lau et al, 2005).

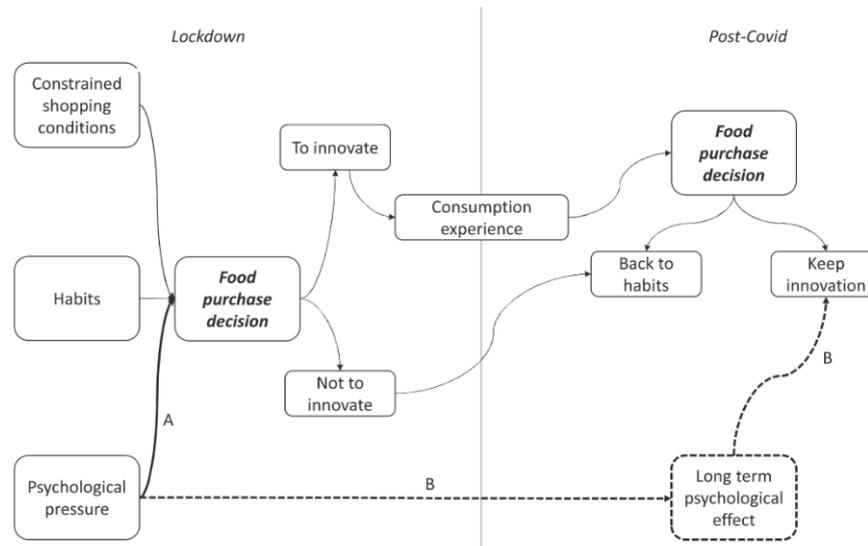
### **2.2.5 Assumptions about the impact of COVID-19 on food lifestyles**

The literature about the long-term influence of the COVID-19 crisis on pre-crisis lifestyle trends within food cultures is still limited, however several studies have already hinted towards several changes. However, an article by AlTarrah et al (2021), suggests that research on long term influence conducted within the most intensive phases of the crisis must be treated with caution, since the consumers were in a loaded emotional situation when making assumptions about the future. Another point of critique about the studies carried out during the COVID-19 pandemic is that there were tremendous differences in demographics such as gender and country of origin and one should wait for the actual changes and not generalize any findings (AlTarrah et al, 2021).

As already stated in the introduction, the COVID-19 crisis is a crisis with a scope that has never existed before. It affected societies all over the world and therefore had a great impact on the eating patterns of humans. Since at the beginning the severity of the crisis was difficult to assess, several researchers assumed that the food consumption behavior would also be affected in the long run, with alterations of some society's food lifestyles (Byrd et al, 2021). For instance, relatively at the beginning of the pandemic, a study of Russo et al (2021) highlighted the short-term changes of food consumption behavior, but also aimed to get a picture of the long-term effects the pandemic might have. Therefore, the authors conducted a study where they asked the participants about their planned food purchasing behavior after the pandemic has passed and if the dietary changes will persist. According to the authors the pandemic has made consumers buy food products that they would usually not buy and therefore vary from their classical buying tendencies. They established that constraints in outlet choice but also psychological factors such as stress are responsible for that planned behavior. The authors further stated that if the constraints diminish, the new buying behavior depends on the experience made with the altered food consumption during the pandemic as well as potential long-term psychological effects the

pandemic has on one's preferences. The authors have therefore developed a framework (Figure 4) illustrating this potential effect (Russo et al, 2021).

FIGURE 4: CONCEPTUAL FRAMEWORK



Source: Russo et al, 2021

A study-initiated Europe's leading food innovation initiative that gets support by the European Institute of Innovation and Technology (EIT) provides profound insights in how far food behavior has developed within the crisis. However, the EIT (2020) report also highlights the surveyed people's intentions about after crisis food consumption and therefore also indicates potential long-lasting changes in lifestyle. More than 30% of respondents indicated that they expect their changed food consumption behavior will last over time or at least over a long-term period. Before elaborating on these potential changes, one must mention that the authors of the report also point out that the potential changes are heavily influenced by the different restrictions that vary from country to country. To be exact, those countries in which more intensive restrictions happened, the more influence the crisis will have on future food consumption. Moreover, cultural, and socio-economic differences that have existed before the pandemic also have an influence on the resulting changes. Another observation is that the long-term behavioral change is also depended on the age. The younger the individuals, the more the COVID-19 crisis has influenced their life and consequently also the behavior (EIT, 2020).

The EIT Report further assumes 5 major findings for future food consumption:

- Food will have an overall higher significance
- Food preparation at home will matter more
- The cost and access to food will be more important
- An increased priority with regards to healthy nutrition
- Increased importance towards sustainability

As already indicated above, the increased significance of food accelerated by several lockdown phases will likely continue after all the restrictions are lifted. About a third of the surveyed Europeans indicated that they would start to put more time in meal preparation at home and consume a broader range of food products. Although the affordability of food will remain a priority to people, they will have an increasing interest in value for money. This means that the low cost of food should not come at the cost of health and quality. About the half of respondents mentioned that a healthy consumption will be more important to them than it used to be. Apart from one's own health, the people also assumed that they will further adapt their behavior towards a healthy planet which comes from the fear of further crisis. One of the indicated goals was to further support local producers after this has been done by many in the pandemic (EIT, 2020).

Ginnaneshi (2020), had a look at the future of food through the lens of anthropology which gives a good round up to this literature review. They investigated the consequences of the crisis on the entire food system and explores the cultural meaning of food. According to the authors the influence on the long-term cultural aspect of food will only be comprehensible a few years after the pandemic has passed. However, the researchers see the pandemic as a societal phenomenon that alters the cultural meaning of food in four aspects. The four named categories are: 1) Security, 2) Mirror of society, 3) Identity and 4) Ritual value. For this thesis the latter three are worth mentioning. Regarding food as a mirror of society, the authors state that in the last years there were several developments with regards to social changes that were included in the meaning of food. With that the authors refer to the fast-food hype, mass production of processed foods, the eating out trend and food becoming associated with brands. The authors state that some of these social aspects of food are going to change because of the crisis. For instance, the increase in smart working/home office will continuously increase the popularity of food preparation at home, food delivery services and making purchases online. Moreover, they compare the impact of the COVID-19 crisis on food consumption to that of a war conflict. They further assume that food will increasingly act as a shaper of identity – food will therefore be an even more important part of people's lifestyle (Ginnaneshi, 2020).

## 2.3 Case Study Austria

To provide an understanding on how a crisis may influence a societies food culture, the example of the country Austria was applied for the primary research process. The country was chosen since the government had a very similar COVID-19 restriction approach as other European countries and therefore the case study may also provide insightful information for Europe as a whole. In general, the Austrian gastronomy has suffered to a great extent due to long periods of lockdowns that forced restaurants to close, but also preponed closing hours. As already introduced in the literature review, especially at the beginning of the pandemic, sudden changes in consumer behavior have made gastronomy experts insecure about the future of gastronomy and unsure about general future customer behavior. The case of Austria will therefore be used to illustrate if the crisis had an impact on food lifestyle trends and therefore also on societies food consumption patterns in general.

### Food Culture in Austria:

The food culture in Austria is eclectic. The cultural food environment of Austrians ranges from a great number of rituals and ceremonies over differences in norms of table manners to various regional delicacies. Throughout history, various cultures have influenced the traditional food environment in Austria. Quite often, this was due to occupational background. Nowadays the Austrian diet is described to be heavily influenced by other European food cultures like Italian or eastern European ones, however, is further diversified due to migration phenomena. As the Austrian population grew with an increasing number of ethnicities, religious and cultures, its food offer also has diversified. The Austrian kitchen is known for its heavy, calorie and fat dense diet. In general, it is said to be rather unhealthy since the nations favorite dishes are including a lot of meat, sugar, and salt. However, one must mention that due to changes in lifestyles, but also other influential factors especially younger generations have started to change their food consumption habits. Regarding the Austrian food culture one can further say that it has a very social dimension. In general, people in Austria are known to love food. To be exact, food is particularly valued and relished, and meals are celebrated. The original food consumption behavior is often described to be quite slow and unhurried, corresponding to Austrians general mentality named "Gemuetlichkeit" that is distinctive to the Austrian culture. In Austria food relates to a happy environment that produces a sense of belonging and social acceptance. In the last years however, this behavior has partly changed due to more convenient lifestyles and the corresponding increasing offer in fast food outlets. However, one can still say that food is enjoyed at home but very often also in restaurants and cafes which therefore also are an integral part of Austrian food culture (EuroFIR; 2005).

### 2.3.1 Hypotheses development

Considering the extant literature, it is fair to assume that covid has significantly impacted food consumption trends among Austrian consumers. Specifically, building upon the identified trends it is hypothesized that:

#### Health:

H0: There is no significant difference between the interest in health-focused food consumption pre-COVID and post-COVID

H1: There is a significant difference between the interest in health-focused food consumption pre-COVID and post-COVID

#### Sustainability:

H0: There is no significant difference between the interest in sustainable food consumption in Austria pre-COVID and post-COVID

H1: There is a significant difference between the interest in sustainable food consumption in Austria pre-COVID and post-COVID

#### Convenience:

H0: There is no significant difference between the interest in convenience food consumption in Austria pre-COVID and post-COVID

H1: There is a significant difference between the interest in convenience food consumption in Austria pre-COVID and post-COVID

#### Quality/Pleasure

H0: There is no significant difference between the interest in pleasure in combination with food pre-COVID and post-COVID

H1: There is a significant difference between the interest in pleasure in combination with food of pre-COVID and post-COVID

### 3 METHODOLOGY

The following Methodology section informs the reader about the overall strategy the author adapted to conduct the empirical part of the master thesis. The author will mention her overall research design and provide a reasoning why it was the best fit for resolving the research problem. After the introduction into the authors research design, the exact data collection methods as well as the manner of analyzing the collected data for this thesis will be given. After reading the Methodology section, the understanding of the research findings and its connection to the literature review should be ensured to the reader.

#### 3.1 Research Design

The primary research was conducted with the help of a mixed methods research design. This decision was based on careful consideration and first impressions of the existing literature, that made the author aware of the research gap. In general, a mixed methods research design makes use of quantitative and qualitative data which helps to build a depth of understanding and enables comparison between two viewpoints. This was particularly useful for this research where the author did not only focus on the changed consumption patterns after the crisis but also identified the changed consumption trends in the eyes of experts. The two-sided research approach enabled the author to make conclusions about changes of food lifestyle trends that are explained by changed consumer behavior and showed if experts are generally aware of these changes in food lifestyle trends. This type of research therefore can enable the development of an in-depth understanding on the research problem that may be useful for further studies that are undertaken in a similar context. For the sake of this thesis, the author made use of a quantitative survey and a qualitative expert interview. The author further discusses the used research instruments in the next section (Terrell, 2012; Bengtsson, 2016).

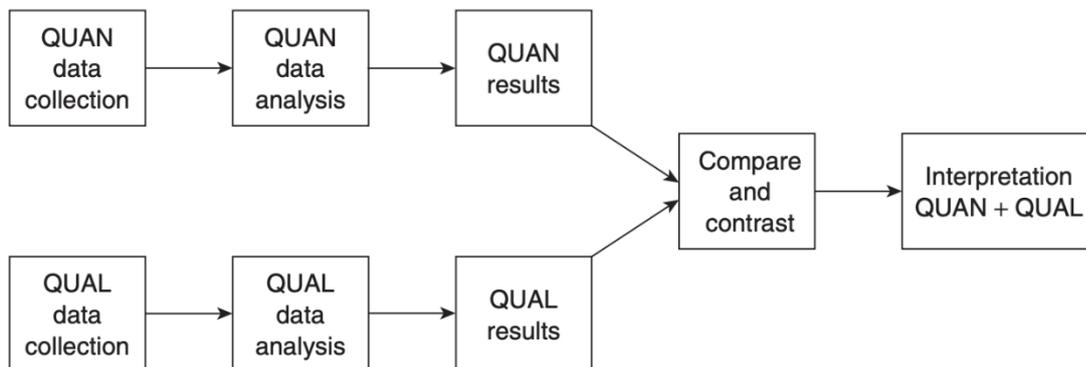
##### Concurrent Triangulation Strategy:

The author perused a concurrent triangulation strategy which is a popular concurrent mixed methods design. A concurrent mixed methods design means that the data is being collected at the same time. The triangulation strategy is the most frequently used design when researchers decide on a concurrent mixed methods approach. This is because with this design several distinctive goals may be achieved, however independent from its application, it is an adequate method to develop a profound knowledge about a certain matter. Further it is of importance to mention that within a concurrent triangulation strategy both types of data have the same weight, meaning that they have the same significance in finding answers to the research question. There exist several models of how a concurrent triangulation design can be done, however

the author of this thesis decided to follow the convergence model (Figure 6). In this model, qualitative and quantitative data is collected and analyzed separately. The separate analysis is followed by a junction of the two distinctive data sets, which means that they were contrasted and later also interpreted conjointly (Creswell, 2014).

This research design was chosen since it perfectly fits the research problem and not less to the research questions. The primary purpose of a concurrent triangulation strategy is to cross-validate within a single study, which was of particular importance to answer this thesis research questions which focus on two viewpoints. An advantage of a concurrent design is that the data collection process takes less time as if one would pursue a mixed research approach sequentially. Apart from that, a concurrent triangulation strategy possesses all the other advantages that can also be attributed to mixed research designs in general. However, there are also some factors one must consider when pursuing a concurrent triangulation strategy. First, it requires a lot of effort to consistently put the same amount of weight on the two data types. Secondly, one also must keep in mind that the two results are based on two types of data, and therefore, the comparison was made under high circumspection (Creswell 2014; Harrison & Reilly, 2011).

FIGURE 5: CONCURRENT TRIANGULATION MODEL: CONVERGENCE MODEL



Source: Creswell, 2014

For the sake of this thesis, the author had to choose two research instruments. Quantitative data is derived from closed ended instruments and qualitative data usually is collected with the help of open-ended sources. The quantitative research process was therefore realized with the help of a survey and the qualitative research process was conducted with structured expert interviews. Corresponding to the convergence model (Figure 5), the two types of research were conducted at the same time, later compared, contrasted and at the end interpreted conjointly. The research instruments are introduced in the following paragraphs (Creswell, 2014).

## 3.2 Research Instruments

The following section informs the reader on how the author has decided to collect the data. As already described in the research design section, the author follows a concurrent triangulation strategy. This predicates that the two types of data are collected at the same time and are not dependent on each other. The author chose the timeframe of April and May 2022 for the data collection process.

### 3.2.1 Quantitative Survey

A survey is a data collection tool that gathers information of a large group of individuals. This information may be about the people's behavior, actions, thoughts, characteristics and more. In general, surveys may be used for a great number of causes. Quite often they are used to evaluate people's needs, understand peoples demands or even to build theories about the impact of a particular factor. Apart from collecting several types of information, they are also suitable for the obtainment of demographical data. Surveys are known to be a research instrument that does not require a high degree of effort within the development phase, but also during the data collection phase. Although the conduction of survey research can be done rather effortless, it is a good tool to generalize about a certain target group. However, one still must consider that surveys only provide estimates and cannot be accounted as exact measurements about the entire target group. Besides the possibility to address a vast number of people, surveys have the advantage that the respondents can answer in a timely flexible way and provide anonymity, which in many cases motivates to respond honestly. In the case of this thesis, the survey was used to gather data about consumers eating patterns and consequently potentially changed food lifestyles trends due to the COVID-19 crisis (Ponto, 2015; Creswell, 2014).

#### Survey development

The survey consisted out of 36 questions. Out of these 36 questions, 32 were directly connected to the four identified lifestyle trends (health, sustainability, convenience, and quality/pleasure), two questions asked for demographical information (gender and age), one was about the participants estimation of the impact of the pandemic on their personal food consumption patterns and the last one was an open-ended question asking for comments and remarks.

The 32 interval scaled questions, that were directly connected to hypotheses testing were separated in two sets of 16 questions, which asked about food consumption patterns before the crisis and nowadays. As one can see in the example of the next paragraph, each trend was part of both sets of questions with respectively four questions. For the question development, the author made use of existing research which used a similar pattern of questioning. Corallo et al (2019) and Onwezen et al (2012) used similar questions for the derivation of food choices.

### Food consumption before Covid-19:

- Before the pandemic, I was very careful about the health effects of the food products I bought
- Before the pandemic, I followed a healthy and balanced diet
- When buying food products before the pandemic, I preferred a lower fat content
- Before the pandemic, I ate fruits/vegetables/legumes daily

### Food consumption now:

- I am very careful about the health effects of the food products I buy
- I follow a healthy and balanced diet
- When buying food, I prefer a lower-fat content
- I eat fruits/vegetables/legumes daily

As already mentioned, the answer possibilities of the questions used for the hypothesis testing were interval scaled from 1 to 5 (low consumption frequency to high consumption frequency). The entire survey as well as the responses are attached to the appendix.

## Data Collection and Sampling Method

Regarding the sampling process, the author decided to choose the surveys population based on literature about food culture. The author concluded to choose Austrian residents above the age of 16, who have lived in Austria throughout the last three years, as a population for this research. The author came to this conclusion, since the author set the criterion that the participants must generally, be aware of their food consumption and must have administered changes in their own consumption behavior. Since food culture and lifestyles are also lived within one's family the sample is not bounded to people who have left their parental home, nor to making food choices on their own. Taking this criterion in consideration, the author decided that 16 years is an adequate lower age limit. However, there are no limits to the top with regards to age. The author chose residency instead of nationality because as the literature has shown, food culture and the corresponded food lifestyles are not limited to nationality and on the contrary also is altered due to migration. The timespan of three years was chosen since it ensures that the participants developed a food consumption lifestyle in Austria before the crisis and therefore also participated in Austrian food culture. This timespan therefore gives enough time to administer changes and ensures that the interviewee is part of the Austrian food culture. (Wilson, 2020; Le, 2017; Boutaud, Becuț & Marinescu, 2016; European Public Health Alliance, 2020)

As already mentioned, the author executed the quantitative data collection by the help of a survey. To be exact an online survey, that was electronically distributed among participants.

The sample selection procedure was not too complicated since the population of the survey is a quite large one. Individuals above the age of 16 who have lived in Austria within the last three years. These criteria fit to much of the authors circle of acquaintances. Therefore, the author simply contacted those via private messages, e-mail, or other contact possibilities such as social media for instance. To ensure a satisfying rate of responses, the author pre-tested the surveys questions regarding their quality and fluidity. The survey was scheduled to circulate around for around seven days at the end of April 2022.

This time frame was enough to collect data from a great number of participants. To be exact, am sample size of 154 persons. After the data collection, the data was analyzed and later compared with the qualitative data collected by the expert interviews. To enhance the response rates, the participants were asked to further share the survey among their circle of friends. The only risk in this proceeding is that it could be that the participants are all within a similar social group and consequently all follow a similar lifestyle. To prevent this “bubble effect”, the author aimed to send the survey to a broad spectrum of people and not just the people that she is closest with. After the collection process, the data was evaluated and samples that did not go through with the entire survey deleted. Apart from the situation with similar social groups/similar social class the author saw no further issues or limitations before the data collection process.

### **3.2.2 Qualitative Expert Interviews**

Expert interviews are one of the most frequently used instruments for qualitative data collection. An expert interview may be described as a guide to collect an expert’s perspective on a certain topic where they possess a high degree of knowledge about. As previously mentioned, the format of the interview in this thesis was structured, which allowed the interviewer to have a full guidance throughout the interview process and to have better means of comparison for the contrasting part of the mixed methods analysis (Döringer, 2020).

In general, expert interviews are a valuable research instrument to develop a good understanding on social reality and on practical circumstances where the literature is limited. With an expert interview, this understanding can be gained in a non-time-consuming manner. Moreover, they are particularly interesting for research where the interviewed experts can be seen as ambassadors for a broader circle of players. Literature differentiates between three types of expert interviews: exploratory expert interviews, systematizing expert interviews and finally theory generating expert interviews. In the case of this thesis, exploratory expert interviews were conducted, since they are commonly used to gain knowledge in a field that is still relatively unknown. They do not aim to find answers to a particular phenomenon but rather to provide a structure to a complex field of research. On the one hand, experts themselves may be the target

group of the researcher's field of interest, on the other hand, they can act as a valuable source to build knowledge on a certain target group, which both is case for this thesis. In this thesis, the exploratory interviews with experts provided the author with additional, practical knowledge about consumers eating patterns before and after the most intensive phase of the crisis (Döringer, 2020; Mayring, 2000).

### Interview development

As already hinted in the introduction of this chapter, like the quantitative collection of data, the qualitative expert interviews were conducted in April and May 2022. The interview questions were chosen according to the identified trends in the literature review (health, sustainability, convenience, and quality/pleasure). In particular, the experts were asked about their perception of those food trends before the COVID-19 crisis and at the time of data collection, in spring 2021. Those industry experts who are working in a gastronomy outlet were asked directly about the consumption patterns of guests in their business.

In total, there were eleven questions, however three of them were more general and eight of them clarifying questions to make exact assumptions about the changes in trends. To ensure that the interviewees would have positive feelings towards the interview it was not too long and pre-tested with several people.

### Data Collection and Sampling Method

To gather experts, the author chose a judgmental sampling procedure since the decision of the expertise of an interviewee is rather subjective and must be met by the author. In general, the author looked for experts that possess a high proficiency in their field of work and are aware of food consumption behavior of Austrian residents within restaurants but also can make assumptions independent from restaurant food consumption. Apart from that, the expert must be engaged in a key position within a business that is connected to the food and service industry. A further criterion was that the expert is an Austrian resident who has lived in the country within the last three years to ensure knowledge about the food lifestyle trends before COVID-19. This resulted in six experts who participated in the study. Two women and four men, who all are of different age. Due to experts with a high expertise in the field and a detailed questioning process, this number was considered as sufficient for this research. The experts all have a different professional background, however, are all closely connected to the Austrian gastronomy scene.

Expert A is a female owner and head manager of a two Michelin star restaurant in Vienna. Expert B is also female and owns and manages a restaurant, however it is a family run restaurant on the countryside which is not as high class. Expert C is a former gastronomy teacher who now advises restaurants in Styria. Expert D is still rather young, however operationally manages more

than five restaurants in Vienna. Expert E and F have both a journalistic background, with expert E being a chief-online editor for several food magazines and expert F being a producer of one of Austria's most important restaurant guides.

The establishment of contact with the experts happened very easily, since the author of this thesis itself is professionally connected with the Austrian food & beverage scene. There are no limitations that result from the study concerning the choice of experts, however one should mention that all the experts are rather affiliated with the middle to upper class gastronomy and only can make assumptions about general consumer behavior. Moreover, the language used for the interviews is German, since this is the mother tongue of the author and interviewees. However, for the sake of this thesis the responses that are of importance for the analysis and the interpretation are translated in English.

In average, the interviews did not take longer than ten minutes. The exact questionnaire used for the derivation of answers can be found in the appendix.

### **3.3 Data Analysis**

As already described within the research design, the data collected within the expert interviews but also the survey were analyzed separately. In order to interpret the collected data, the qualitative expert interviews were analyzed with the help of a content analysis. The quantitative survey was analyzed with the statistical data analysis software SPSS. Both types of analysis are introduced in the following paragraphs.

#### **Quantitative Data Analysis: Statistical Testing with SPSS**

To analyze the quantitative part of the research, the author decided to use SPSS, which allows to test the hypothesis as well as to depict frequencies with regards to different demographical variables. To test for differences between the pre-covid and post-lockdown food consumption of the Austrian society, a Wilcoxon was executed.

##### *Wilcoxon Test*

The author concluded that the Wilcoxon Test would be the adequate choice to test the hypothesis, since a paired t-test was not possible due to missing normality within the data set. The Wilcoxon test is a statistical model that allows to compare the median differences of variables within a single group. This means that this testing method is often used to test two sets of variables with a similar background, however only if the normality assumption is rejected. Quite often the variables are separated in time, which is also the case with the variables used for this thesis. There are certain conditions that must hold true to effectively use the test. First, the

subjects of the population must be independent from each other, which means that the measurement of one person has no influence on the measurement of another person. Also, the data of both sets of variables of each individual person should exist in the data, to achieve an expressive result. These conditions have been considered throughout the entire primary research process. Since most histograms showed, that the data is not severely non-normal, the author also conducted a paired t-test which demonstrated similar results as the Wilcoxon test (Ross & Willson, 2017).

To analyze the data, the author particularly focused on the p-value, which informs the researcher about the significance level. If the significance level is below five percent, the null hypothesis can be rejected. Then the author looked at the Related-Samples Wilcoxon Signed Rank Test, to get an understanding of the median differences between the two sets. Since these two figures are relevant for answering the hypothesis and the research questions, they are included in the analysis section. However, the author also had a look on the Continuous Field Information to see how participants responded and to also understand the mean differences. Due to the complexity and quantity of figures they are not pictured in the analysis section, however they are attached as an annex.

### Qualitative Data Analysis: Content Analysis

The content analysis is increasingly used to analyse qualitative data, in particular interviews. With the content analysis one attaches an actual meaning to the content, which is important for its interpretation. The data which is processed with the content analysis should always result in a highly structured summary of the most important results. To analyze the data, the author first highlighted schemes and patterns in the transcripts and coded the information by establishing categories, that fit to the thesis research questions. The author used a manual method in analyzing each transcript.

For the sake of this thesis, the author developed the following four categories:

- a. Food lifestyle trend: Sustainability
- b. Food lifestyle trend: Health
- c. Food lifestyle trend: Convenience
- d. Food lifestyle trend: Quality/Pleasure

## 4 ANALYSIS AND FINDINGS

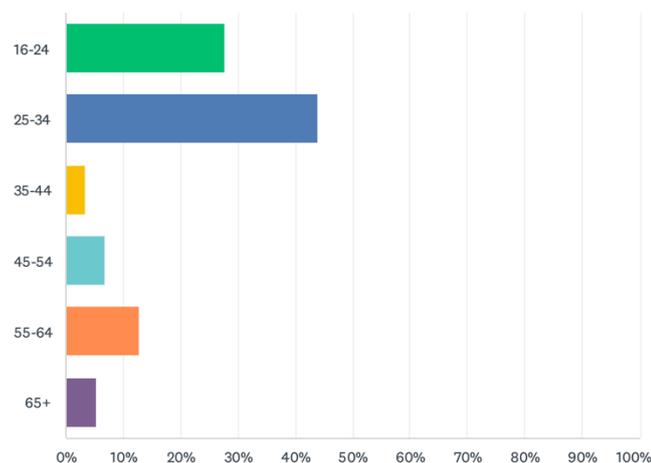
In the following analysis and findings section the results of the empirical research process are demonstrated. In the first part, the most important data collected within the quantitative survey is highlighted and in the second part the results of the qualitative expert interviews introduced. Each section focusses on the four elaborated food consumption lifestyle trends separately. These two types of data are then mapped and contrasted in the data contrasting section.

### 4.1 Survey Results

In this sub-chapter the results gathered from the quantitative survey are reported. After introducing the most important demographical data the findings are separated correspondently to the four hypotheses. As described in the methodology section, the author developed two new variables per trend. One variable that includes all pre-covid variables and one variable that includes all post-covid variables. These two variables were used to test the hypotheses. However, the author also tests each variable individually to see what exact behaviour has changed among consumers. At the end of the survey results section, the survey participants personal assessment and comments about their potential food lifestyle change are given.

#### 4.1.1 Demographical data

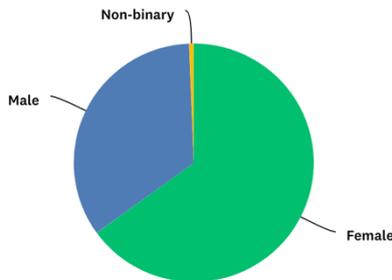
FIGURE 6: AGE DISTRIBUTION



The age distribution of respondents ranges from 16 to over 65, as visualized in Figure 27, where 6 distinct groups were provided as options for respondents. Within these groups the results were ultimately distributed as followed: 28% of respondents are between 16 and 24 years old - 44% are between 25 and 34 years old - 3% are between 35 and 44 years old - 7% are between

45 and 54 years - 13% belong to the group of 55-64 years and 5% to the age group of 65 and above. What is notable about the distribution is that more than half, 72% percent of respondents are younger than 35.

FIGURE 7: GENDER



Looking at the gender distribution in Figure 28, most of the audience was female. The distribution is as followed: 34.46% male respondents, 64.86% female respondents and 0,68% non-binary.

#### 4.1.2 Hypothesis testing: Health trend

TABLE 2: HYPOTHESIS TESTING HEALTH

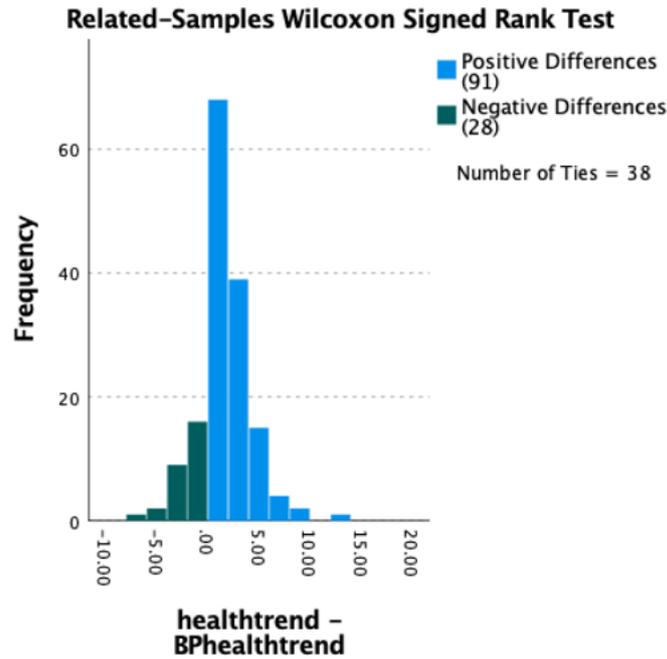
Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The median of differences between BPhealthtrend and healthtrend equals 0.	Related-Samples Wilcoxon Signed Rank Test	<.001	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Table 2 shows the two sum variables based on the healthy food consumption lifestyle that were tested for differences have a p-value of <0.001, which clearly shows that there is a significant difference between pre-covid health-based food consumption and after-covid health-based food consumption. One should therefore **reject the null hypothesis**.

FIGURE 8: WILCOXON SIGNED RANK TEST HEALTH TREND



The signed rank test for the sum variables, as depicted in Figure 6, shows that of the 157 participants, 91 have an after-pandemic food consumption that is overall healthier, or at least this is what the positive median differences let one assume. However, 28 participants have indicated that their food consumption has worsened in terms of health. 38 participants have ties in their median differences, which means that overall, their health food consumption has not changed. However, since this variable consists out of 4 individual ones, one must have a look at them individually. The individual variables are 1) focus on health effects, 2) a balanced diet, 3) lower-fat consumption 4) fruits/veggie food consumption.

FIGURE 9: HEALTH EFFECTS

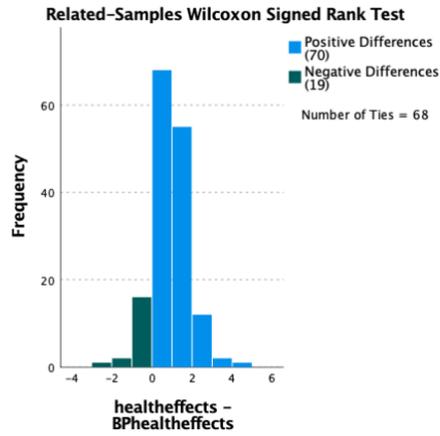


FIGURE 10: BALANCED DIET

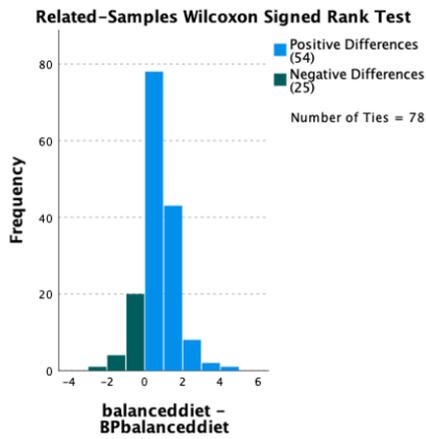


FIGURE 11: LOWER FAT

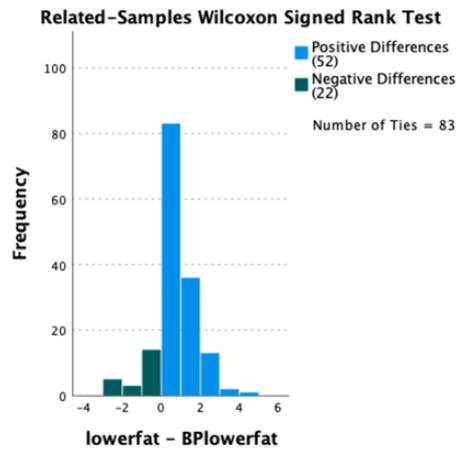
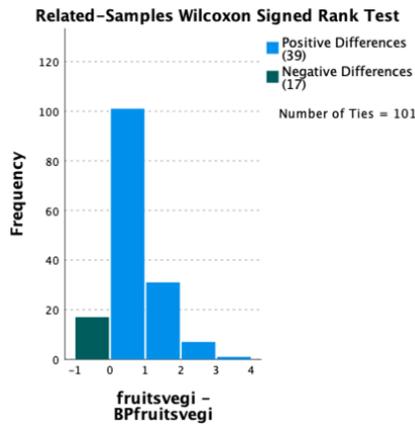


FIGURE 12: CONSUMPTION FRUITS AND VEGIS



Regarding health, the median differences show that all four after-pandemic consumption patterns differed significantly to those of before crisis times. As one can see from the rank tests (Figure 7-10), the changed consumption patterns appear to be largely based on consumers having a higher focus on health effects (Figure 7). Concerning the focus on health-effect the differences between the two time periods were the strongest. There were 70 positive differences, 19 negative differences and 68 ties. Besides the median, one can further have a look at the mean, which for all four variables is higher after the pandemic. The total mean difference of the entire health-based food consumption category is a numerical increase of 1.1. points. The health effects variable, where the median difference was the strongest, also has the biggest mean increase with 0.4. The second highest mean increase was an increase of 0.3 concerning fat-based food consumption. The mean increase in a balanced diet and regular fruits/veggie food consumption both contributed 0.2 to the overall mean increase.

### 4.1.3 Hypothesis testing: Sustainability trend

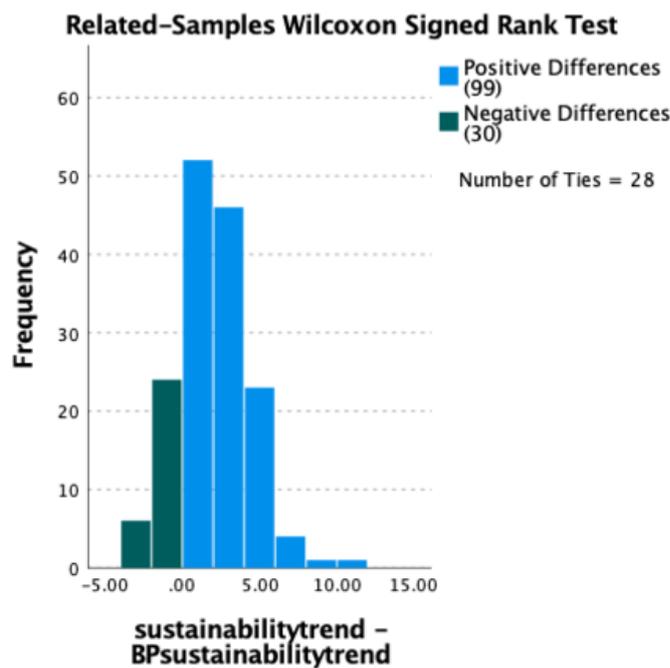
TABLE 3: HYPOTHESIS TESTING SUSTAINABILITY

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The median of differences between BPsustainabilitytrend and sustainabilitytrend equals 0.	Related-Samples Wilcoxon Signed Rank Test	<.001	Reject the null hypothesis.

a. The significance level is .050.  
 b. Asymptotic significance is displayed.

The sum variables in Table 3 concerning sustainability also show, that there is a significant difference. The p-value is below the significant level, and one therefore can **reject the null hypothesis**.

FIGURE 13: WILCOXON SIGNED RANK TEST SUSTAINABILITY TREND



In Figure 11 the signed rank test of the two sustainability variables shows that differences are even bigger than those of the health-based food consumption. 99 survey participants appear to eat more sustainable now than before the pandemic. Still, 30 people have indicated negative changes in their answers, which add up to a general negative outcome of their sustainable food consumption. The 28 ties once again do not indicate that for 28 participants nothing has changed, because some of the variable outcomes may even each other out. These individual variables must be looked at more closely. The individual variables are 1) a focus on the organic claim, 2)

buying from farmers markets, 3) caring about the products origin and 4) focus on the environment and sustainability.

FIGURE 14: ORGANIC CLAIM

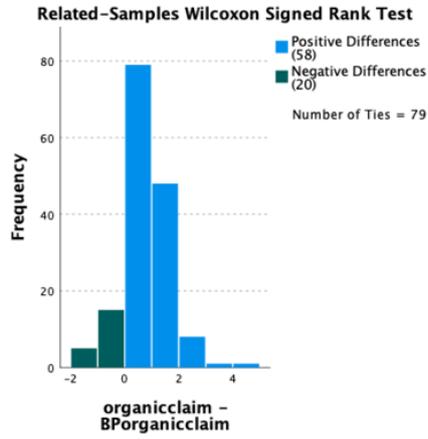


FIGURE 15: ORIGIN

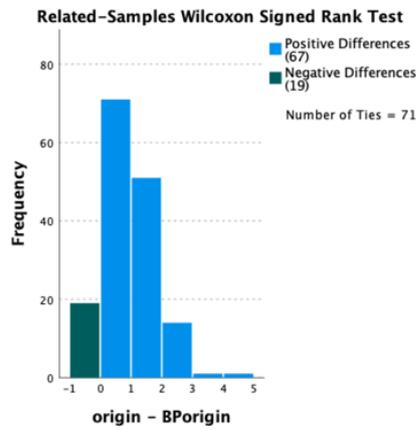


FIGURE 16: FARMERS MARKET

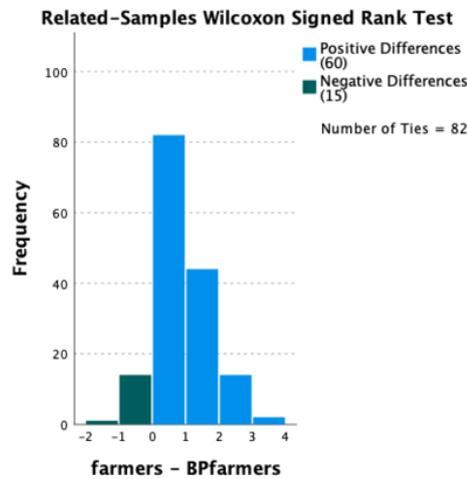
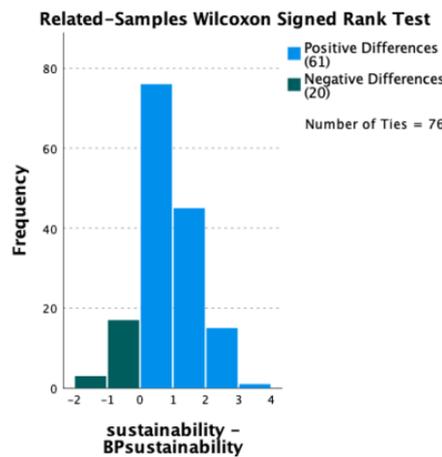


FIGURE 17: SUSTAINABILITY AND ENVIRONMENT



When looking at the signed rank tests in the sustainability category (Figure 12-15), it shows that all the median differences vary significantly to before crisis times. In the sustainability category, all four variables have contributed to a very similar degree to the result elaborated with the sum-variable, however, the origin variable (Figure 13) shows the lowest number of ties with 71 and the strongest median differences to pre-covid food consumption: 67 positive differences and 19 negative differences. When looking at the mean differences in the continuous field option, the mean of the sum variable increased by 1.4 points. The 1.4 points consist out of mean increases of 0.4 points of people buying more farmer market-based products and being more aware about the products origin after the crisis but also increases of 0.3 points in sustainable/environmentally friendly food consumption and the focus on the organic claim.

#### 4.1.4 Hypothesis testing: Convenience trend

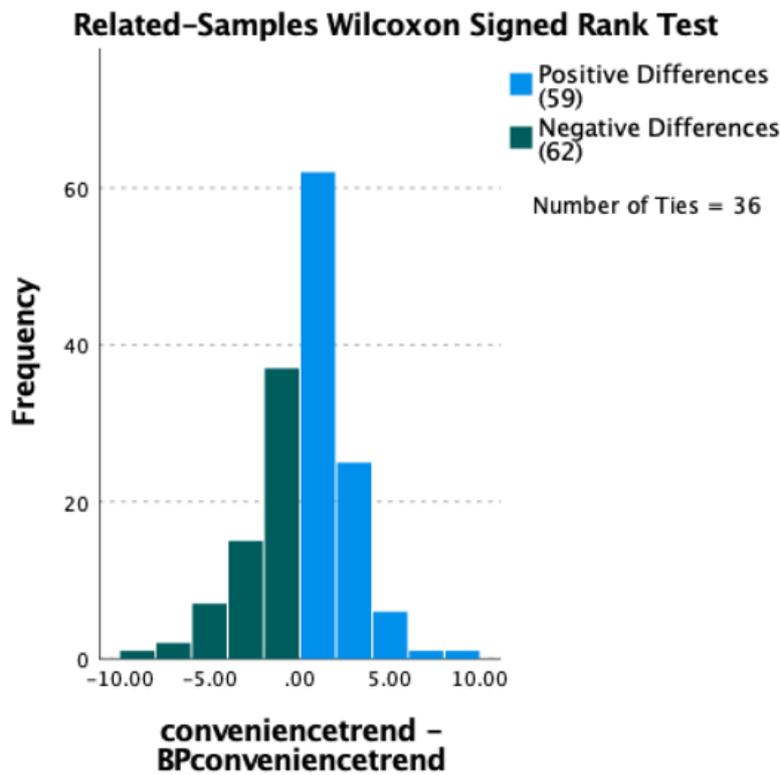
TABLE 4: HYPOTHESIS TESTING: CONVENIENCE

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The median of differences between BPconveniencetrend and conveniencetrend equals 0.	Related-Samples Wilcoxon Signed Rank Test	.490	Retain the null hypothesis.

a. The significance level is .050.  
 b. Asymptotic significance is displayed.

Concerning food consumption that is convenient, the hypothesis test in Table 4 shows that one should **retain the null hypothesis**. The p-value is above the significance level. This would mean that there is no significant difference in before- and after COVID-19 food consumption.

FIGURE 18: WILCOXON SIGNED RANK TEST CONVENIENCE TREND



The signed rank test (Figure 16) shows that there were 59 positive differences, 62 negative differences and 36 ties. To understand the data more clearly, the individual variables were analysed as well. In this category, the individual variables are: 1) frequency of eating out 2) time of consumption, 3) time of planning, 4) physical effort needed to prepare the food.

FIGURE 19: EAT OUT FREQUENCY

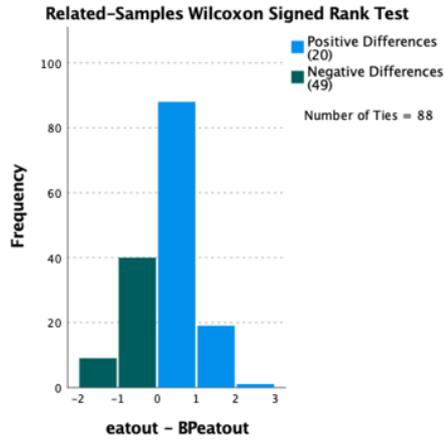


FIGURE 20: TIME EFFICIENT FOOD CONSUMPTION

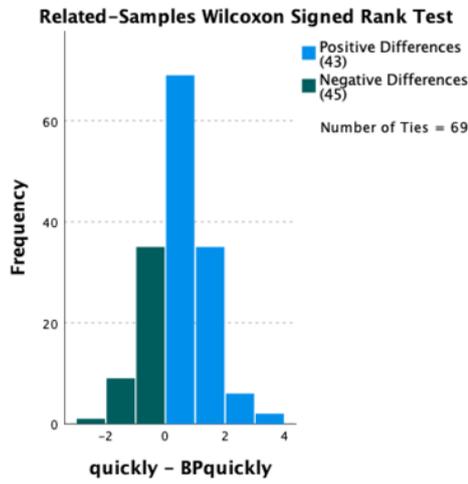


FIGURE 21: PLANNING

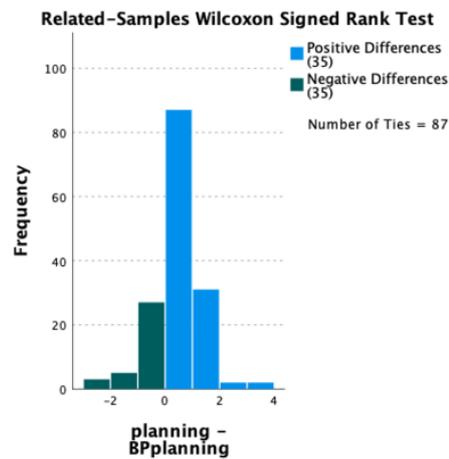
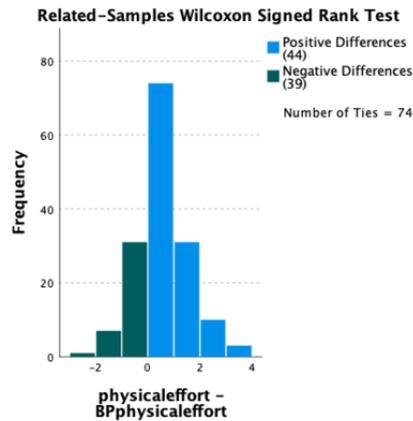


FIGURE 22: PHYSICAL EFFORT



When testing the four variables for time differences individually, it provides an interesting picture. In three out of four variables (Figure 17-20), there is no significant difference. There is only a significant median difference in the interest of eating out (Figure 17), however in this case it is a negative one. 49 negative differences, 20 positive differences and 88 ties. This would mean that 49 participants eat out less frequently than before the pandemic, 20 more often and for 88 nothing has changed. The mean difference concerning eating out is about 0.3 points lower now that it was before the pandemic has started. When looking at the mean difference of the entire category, the value has only decreased 0.2 points, which similarly to the median difference shows that in this entire category, there is no real difference in convenient pre-covid food consumption and food consumption now.

### 4.1.5 Hypothesis testing: Quality/Pleasure trend

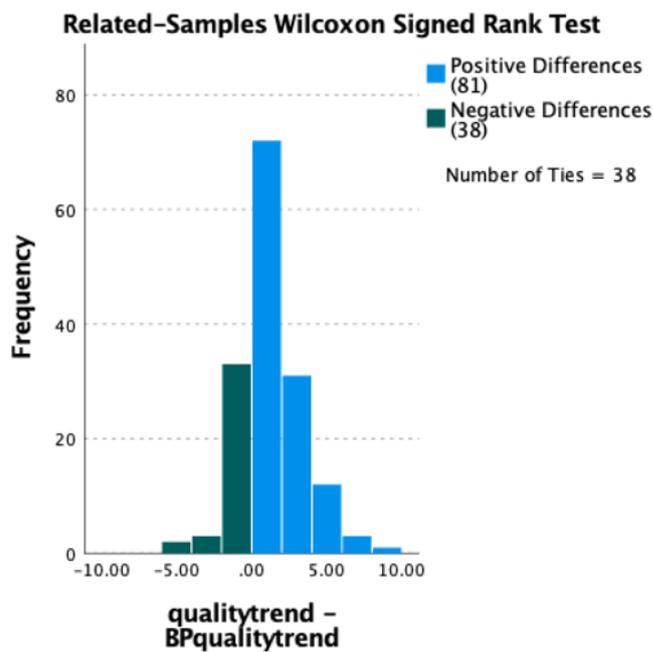
TABLE 5: HYPOTHESIS TESTING: QUALITY/PLEASURE

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The median of differences between BPqualitytrend and qualitytrend equals 0.	Related-Samples Wilcoxon Signed Rank Test	<.001	Reject the null hypothesis.

a. The significance level is .050.  
 b. Asymptotic significance is displayed.

Regarding food consumption that is based on quality and pleasure, the hypothesis test depicted in Table 5 shows that the p-value is below the significance level and one can therefore **reject the null hypothesis**. This would mean that there is a significant difference between the interest in qualitative food products before the pandemic and the interest in quality nowadays.

FIGURE 23: SIGNED RANK TEST: QUALITY/PLEASURE



Similarly, to the health trend, but also the sustainability trend, Figure 21 shows the positive differences are more than the negative ones. This would mean that people generally focus more on quality/pleasure in their eating experience that before the COVID-19 crisis, or at least are more interested in it. There are 81 positive differences, 38 negative ones and 38 ties. The individual results once again should be looked at more closely on an individual level. In this category, the variables were 1) overall quality, 2) focus on taste, 3) focus on brand and 4) the sensibleness towards preservatives.

FIGURE 24: FOCUS ON QUALITY

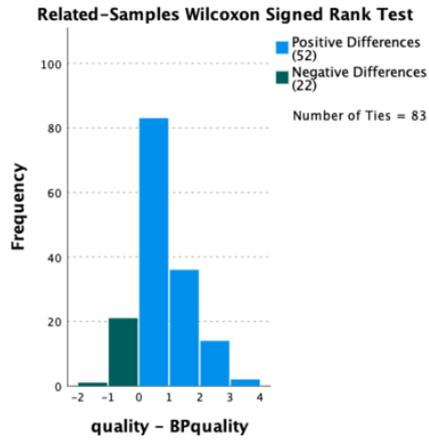


FIGURE 25: FOCUS ON TASTE

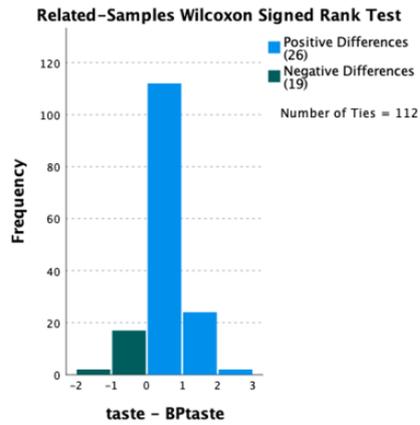


FIGURE 26: FOCUS ON BRAND

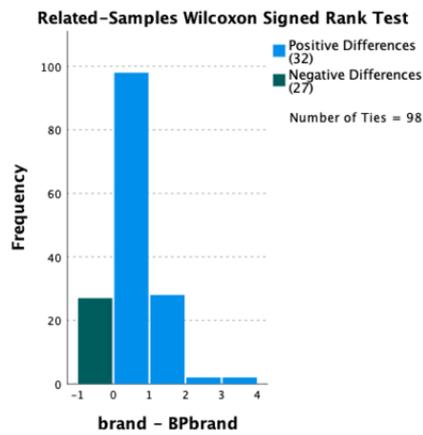
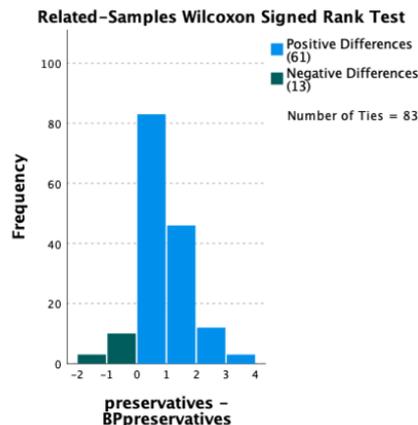


FIGURE 27: FOCUS ON PRESERVATIVES

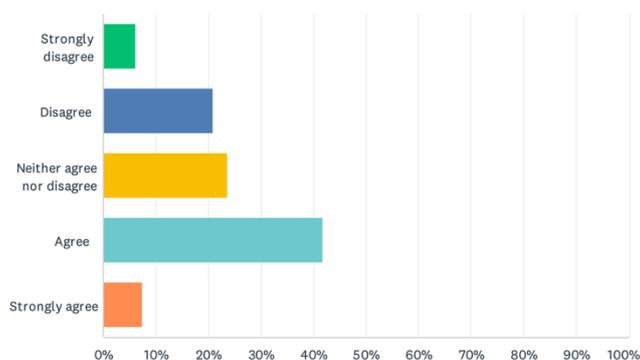


Food consumption in terms of quality and pleasure is also a very interesting category. As already stated above, there is a significant difference, and the null hypothesis can be rejected. Looking at the variables (Figure 22-25) individually, the null hypothesis can only be rejected in two cases: focus on overall quality and preservatives in food. When looking at the median differences, these two variables appear to contribute to the same amount to the overall change of interest for the entire category/trend. Both variables have 83 ties; quality food consumption has 52 positive differences and 22 negative differences and when comparing consumers use of preservatives, there were 61 positive differences and 13 negative ones. Regarding the taste of food and the focus on brands, there is no significant difference observable in the data. Also, the mean value for both individual variables does not change in the course of time. Overall, the mean value for the entire trend increases about 0.8 points.

#### 4.1.6 Participants comments

##### *Comments and assessment*

FIGURE 28: PERCEIVED EFFECT OF COVID ON FOOD CONSUMPTION



In addition to the questions that focused on the hypotheses testing, the consumers were asked to give a general assessment if COVID-19 has influenced their food consumption patterns as depicted in Figure 26. Of the 148 participants, 9 people indicated to strongly disagree, 31 disagreed, 35 were unsure, 62 agreed and 11 people agreed strongly.

Furthermore, the author gave the participants the possibility to share details about the development of their food consumption lifestyle, which gave 48 very interesting insights. Some issues were named more than once.

- After an increased focus on cooking the participants consumption patterns are now as they were before the pandemic
- The pandemic has made people to start ordering organic and regional produce baskets regularly.
- Participants focus more on their sugar consumption
- Changes in consumption are influenced more by age than by COVID-19
- There are also other factors involved in the food consumption changes
- Participants name the changes in price as a big influencer of their lifestyle
- Higher food prices make healthy eating patterns difficult
- Participants focus more on regionality
- The crisis made participants to cook at home more frequently
- Pandemic made a participant to order less from delivery services due to low quality
- COVID-19 changed the general way of thinking about food
- Made some eat less meat
- Some started to eat more regularly and consciously
- Some are less eating out and rather prepare quick easy meals at home
- Social Media has influenced eating habits

## 4.2 Expert Interviews Results

In the following section the content of the expert interviews is analyzed. At first the author will highlight the experts' answers regarding the four food lifestyles before the pandemic and consequently about the experts perceived change since the pandemic has happened. The questions and corresponding answers do not only include restaurant food consumption but also consumers general food consumption patterns. However, the experts that directly work in restaurants were asked about their personal experiences, since the author concluded that lifestyle trends that are observable in restaurant food consumption are also relevant in general food consumption.

### 4.2.1 Expert interview: Health trend

At first, the authors questions focused on health-based food consumption decisions before the crises has started. All in all, all experts had the same opinion: already before the pandemic there was a general interest in the health and wellness trend observable. According to experts A and B, in their restaurants people are not as strict as at home because they are normally visited by people who celebrate a special occasion. However, most experts have witnessed decreased meat consumption and an even more decreasing consumption of sugar. According to them, people increasingly love the "lighter" option. Also, intolerances were often mentioned in combination with guests' health focus. Expert D mentioned the fitness and body image hype, which according to him is also responsible for people living a healthier lifestyle.

The answers regarding the influence of the pandemic on the healthy food consumption trend were quite similar. All experts, except one assume that the pandemic did not have any influence on the health trend. Expert A, the expert who works in the two Michelin starred restaurant, assumes that the crisis has slightly changed people's attitude towards a healthy food consumption, which is because the crisis has made people think more about their overall health. However, she also added that people in Austria will never let go of their "Schnitzel", which is a typical Austrian dish that is not necessarily considered as healthy. The others all assume that the pandemic did not alter the healthy food lifestyle trend. Expert B also answered with no change, however on the contrary rather would understand if people stopped thinking that much about calories and ingredients since after all restrictions, they want to enjoy their life. Expert C and D think that if people improved their diet in the short run during the crisis, they have now changed it back to pre-crisis trends. Expert D mentions that it could be that guests are slightly stricter at home than in restaurants, however, assumes that normally restaurant food consumption depicts the general attitude towards food. Expert F thinks that if people have changed their food consumption patterns towards a healthier lifestyle, this is due to several individual factors and not due to the pandemic.

#### 4.2.2 Expert interview: Sustainability trend

Also, regarding sustainability all the experts could not only witness the sustainability trend in their own restaurants (if applicable) but also in general food consumption habits. The experts, who have experience from restaurants, all have integrated more sustainable food offerings in their menu, even a few years before the pandemic has started. In the Michelin starred restaurant, regionality and a general consciousness towards the environment has been part of the concept for many years. This concept is not only appreciated by guests but also the entire fine-dining scene. Expert B's restaurant even has incorporated the origin of meat products in their written menu. Guests should know where their meat comes from and consequently be more willing to pay higher prices – which is the case for most of their guests. Experts C and D referred to the rise of veganism in recent years, which developed due to more conscious eating patterns. Expert D mentioned, that more than  $\frac{3}{4}$  of their restaurants menus is either vegetarian or vegan. Guests also are also very appreciative towards milk alternatives. Experts E and F also explained that supermarkets but especially restaurants nowadays always claim their products to be regional and seasonal which is necessary because consumers want that.

When being asked about the influence of the pandemic, the experts gave a distorted picture. Four of them have witnessed a slight increase in the trend in restaurant consumption, or at least assume that the lifestyle trend has slightly increased in intensity. Two of them claim that nothing has changed. Those that assumed that the trend has changed explained it with the following reasons. Expert A answered that people think more about general lifestyle choices and expert B could not really add any reasons to her assumption. Interestingly, expert D has noticed that more people choose plant-based alternatives now, however, assumes that this could also be based on the general trend which has nothing to do with the pandemic. He further said that especially for younger consumers, plant-based options are a must. Expert E, who also assumes that the trend has slightly increased, said that the reasons for this behavioral change maybe are based on the increasing time spend at supermarkets, farmer markets and farmer visits during the lockdowns. Consumers had nothing else to do and these visits started to be the highlight of their day. This has probably made them more conscious towards the origin of food products and consequently consumers focus more on that during their food choices. In supermarkets but also in restaurants. Expert C, who did not agree that the interest in the trend has changed, only could imagine that within some bubbles the behavior has changed. However, there are simply a lot of people who cannot afford sustainable food consumption, especially after the pandemic.

### 4.2.3 Expert interview: Convenience trend

That some consumers have increasingly relied on convenient food consumption in the years before the pandemic is clear to all experts. Especially in urban parts of Austria, because according to expert B and C, on the countryside everything is slower paced. Expert C, the former F&B professor, does not assume the trend to be of long-lasting nature. He thinks that the trend is an outcome of lifestyles lived by generation X and Y. In his opinion, this will change in the future and then referred to the work-life balance which is especially lived by younger generations. Younger generations want to work less and spend more time on the things they love, and food and drinks are loved by many. The more these generations penetrate the work force, the more this trend will go away, he assumes. This is probably hoped by expert D, who has a bad experience with convenience, especially delivery services. According to him, this is because these businesses take a lot away of the money what restaurants should get.

The experts once again do not share the same opinion regarding the pandemic's impact on this food consumption lifestyle. Three of the experts do not expect the crisis to have a particular effect on convenient food consumption, expert D believes that the trend has decreased, and expert A and B think that the trend has slightly increased. Expert D explained the "decrease" answer with the assumption that people nowadays would rather go the extra mile for good food than before the pandemic, since they gained an understanding about what good food is about during the crisis. Quite interestingly, experts A & B said the exact opposite, which is that consumers got very lazy during the pandemic and therefore would rather pursue a lifestyle which enables them an effortless and time efficient food consumption. The other three experts see no difference because everything is back to normal. Expert E mentioned that those, who were lazy before the pandemic are also lazy after the pandemic and those who had a stressful life also have a stressful life now. He further adds, that for those people the options may just have increased due to a rise in online supermarkets.

#### 4.2.4 Expert interview: Quality/Pleasure trend

This is the trend where the experts agree the most. All of them have witnessed that the interest in food consumption and consequently also the expectations people have of food has increased, even a few years before the pandemic. According to expert A, in her restaurant, the guests have always looked for quality but at the same time also pleasure, which is due to the price they pay. Also, the customers in her restaurant have diversified, which makes one assume that more people want to do something good to themselves. However, also in general she has witnessed that people want to live their life to the fullest. This opinion is shared by all the other experts. Expert C brings the term foodie in, since he assumes that the significance of food is to a great part based on social media, where nowadays everybody wants to be portrayed as a foodie. Expert E sees that similarly and mentions media having a big influence on this trend. He would not have to pursue his job (food journalist), if there would not be many people who are generally interested in food. Also, expert F mentioned this aspect and thinks that consumers search for the best experience everywhere. At restaurants, at fast-food places and at home. He says that these premium fast-food places which one can see more often nowadays would not exist if people would not be willing to pay a price premium.

As already hinted, also regarding the interest in qualitative food after the pandemic, the experts are on the same side. All of them think that the pandemic influenced people to care more about food. Consequently, they think that the interest in qualitative food consumption and the corresponding trend has increased or at least slightly increased. For instance, expert B stated that people look for food of higher quality but at the same time are not afraid of any guilty pleasure. According to her, these two things however can easily coexist. Expert A contributed to the research with an interesting thought, which is, that the interest in quality goes hand in hand with the interest in health and sustainability, since that increased focus on food makes one more conscious about food choices in general. Expert D assumes that the increased quality-trend is the countertrend to convenience because the pandemic has made people think more about their food choices and do not mind if the entire food consumption process includes more effort. Expert F on the other side thinks that the quality and convenience trend are increasingly intermingled and mentions “premium-fast-food” as an example. He further added that the focus on food has shifted. Expert D and E also mention a small disclaimer. Qualitative food consumption can only be lived by those who can afford it. And those who cannot afford it are consequently less interested in it in their daily life.

## **4.3 Data Contrasting**

### **4.3.1 Food Lifestyle Trend: Health**

When contrasting the data, it shows that most experts were not right about the consumers lifestyles and that there exist a few discrepancies. The survey demonstrated that there is a difference in interest before and after the pandemic. The change is not tremendously big, but consumers appear to be particularly more curious now about the health effects of food. Only one expert has mentioned that she thinks that the interest in the trend has increased. She even named the focus on health effects. The other experts do not think that the crisis has shifted the interest in health, because for most consumers everything is back to normal, and they do not fear their health to be harmed anymore. However, not only the quantitative analysis itself, but also some comments made by the survey participants give a good insight in their health-based consumption. A few noted that the crisis has made them enjoy preparing healthy food and consequently have started to cook at home more frequently. Not only did some remark that they are trying to have a healthier diet, but they are also trying to cut on sugar and meat. Sugar, meat, or anything else – consumers worship balance. However, when looking at the comments made by the experts, this balance or healthier diet is not necessarily important during restaurant visits or at least not in the mind of the experts.

### **4.3.2 Food Lifestyle Trend: Sustainability**

Regarding sustainable food consumption, the two types of collected data show more alignment, however there are also some discrepancies. When only looking at the survey results, the sustainable food trend is the trend which has intensified the most during the pandemic. In particular, the survey showed that buying more farmer market-based products and being more interested in the products origin after the crisis is of interest to many. Also, relatively many experts assume that there is a significant difference between the sustainable food consumption before the pandemic and nowadays. Some experts explain the difference with people being more interested in the origin of their food due to several farmer visits made during the pandemic, so in this aspect the two viewpoints align. Other experts said that one can also see the increased focus on sustainability directly in the restaurant food consumption. More vegans, more alternative products consumed and a general bigger awareness towards the products origin. These points are also of importance to the survey participants. The experts, who do not see a difference are aware of the sustainability trend in F&B and know that is an important aspect, however, do not necessarily link potential advancements to the pandemic. Some interviews with experts but also the comments made in the survey name financial constraints as obstacle that prevents people to eat more sustainable, so there is also alignment observable. The survey results however

clearly show that there is a significant difference in several fields of sustainable food consumption and consumers are directly linking the pandemic to it.

#### **4.3.3 Food Lifestyle Trend: Convenience**

When looking at the data of convenient food consumption, it is rather difficult to come to an elaborated solution. This is, because already the opinion of experts is rather unequivocally. To be exact, one half of the experts assumed that the convenience trend was influenced (one negatively and two positively), the other half did not assume that any changes happened to the trend. The survey results showed that there is no significant difference, at least not overall. According to the survey, consumers do not care more about the physical effort when preparing their meals and they spend the same amount of time in their planning processes. Maybe this can be explained by the argument of expert D, who sees the increasing interest in qualitative food as a counter trend to convenience or expert E and F's argument that those, who were lazy before the pandemic also are lazy now. The survey participants further noted that they do not spend less or more time consuming the food they buy. Experts A & B said the exact opposite, which is that consumers got very lazy during the pandemic and therefore would rather pursue a lifestyle which enables them an effortless and time efficient food consumption. However, the survey results do not support this assumption. Another interesting point the survey results gives away, is that the frequency of eating out decreased a bit. The reasons for that may be the financial concerns which were mentioned in the surveys comment section and by the experts. Consequently, one can say that there are mentionable discrepancies in the two viewpoints, however some opinions do align.

#### **4.3.4 Food Lifestyle Trend: Quality/Pleasure**

Regarding the Quality/Pleasure trend, which generally shows a higher involvement with food consumption, the viewpoints of experts and consumers seems to align the most. The survey results showed that there is a significant difference in the interest before the crisis and nowadays. Also, most experts assume that the pandemic has contributed to a change in the trend, an increasing one to be exact. According to the experts, the focus on food has changed. There is a different significance. It is interesting however, that the trend where most experts agreed on significant changes in interest, the changes in interest based on the survey are not as strong as for other trends. To be exact, the difference in interest is not as strong as for health and especially sustainability. However, this could be due to several reasons that are discussed in the limitation section in the next chapter.

## 5 CONCLUSION AND DISCUSSION

### 5.1 Summary

This thesis aimed to investigate if a crisis can have a long-lasting influence on food consumption lifestyles by gaining an understanding on the prevalent trends and consumers consumption patterns. Furthermore, the goal was to find out if the viewpoints of experts and consumers align.

After an extensive literature review, where the most important aspects of food consumption, lifestyle research and of course also crises were elaborated on, the empirical research enabled an interesting insight to current “after-covid” food consumption patterns and lifestyles, but also developed into a great basis of comparison to existing literature.

In the eyes of consumers, their food consumption behavior has changed indeed. The data collected via the survey showed that there is a significant difference observable within the 1) healthy lifestyle trend, 2) the sustainable lifestyle trend and 3) the quality/pleasure trend. The results further showed that there is no significant difference in convenient food consumption observable. This means, that three out of four hypotheses could be rejected, and one null hypothesis had to be retained. Industry experts see that differently. For them, only the quality/pleasure trend was affected in the long run by the crisis. However, a few experts also see that the sustainability trend was altered due to the pandemic. Regarding other trends, the opinions vary to a great part, which makes it hard to narrow them down to own viewpoint. When comparing the results to the literature review, they partly fit to the assumptions made by researchers during the most intense times of the pandemic. It is especially interesting to compare this thesis results with the EIT Report of fall 2020, which was based on consumers assumptions about their eating patterns after the restrictions.

The report predicted that food would have an overall higher significance, an argument, which both the survey but also the expert interviews supported. Another prediction was, that food preparation at home will matter more, which also was named frequently in the comment section of the survey. The EIT report also stressed that the cost and access to food will be more important, an aspect which was named by experts as well as by the survey participants. Concerning the EIT claim of an increased priority towards a healthy nutrition, the survey results also can act as support, however the intensity of effect appears to be smaller than previously assumed. Also, almost all the experts have not really witnessed any changes in consumption patterns that go in this direction. The last claim of the EIT report was that people would have a higher focus towards sustainability, which according to the survey is true. Sustainability appears to be the trend with the most increased interest among consumers. Also, some experts see that similarly and those who do not recognize the impact of the crisis, see that this trend matters a lot.

When then comparing the outcomes to literature concerning the impact of a crisis on previous trends, the surprises are not too big. Sedacca (2016) stated that the financial crisis was responsible for the rise of an entire foodie generation (Sedacca, 2016). The results of the survey but also the expert interviews imply similar assumptions about the COVID-19 crisis. According to the empirical research, the focus on food has shifted and people value food to a higher degree. One can also compare this research to the EY study of Merriman (2020) who found out that within a crisis, humans values intensify (Merriman, 2020). Since values are directly connected to lifestyles, one could assume that lifestyle trends also intensify, which can partly be inferred from this thesis (Kröber-Riel & Gröppel Klein, 2013).

Finally, it is interesting, to compare the COVID-19 crisis to the most similar crisis. The SARS-outbreak in China in the early years of this millennium. The health crisis was a lot smaller in scope than the COVID-19 pandemic and therefore did not lead to much research connected to lifestyles. However, after decreasing meat consumption and other differed eating patterns, people returned to their normal way of living as the crisis was declared as over. Only in Hong Kong, which was the epicentre of the past pandemic, people developed healthier (food) lifestyles (Lau, 2005). In Austria, after the COVID-19 crisis, this does not seem to be the case. Not in the eyes of experts, and in the eyes of the consumers only moderately.

## Summary Research Questions:

Besides being a basis of comparison to previous research, the empirical part of this thesis provides answers to the research questions.

### ***RQ1: In the eyes of consumers, how has the food consumption behaviour changed during the crisis?***

In the eyes of consumers, their food consumption behaviour has changed. They assume to eat healthier, more sustainable, and to have an increasing focus on quality and pleasure. The assumptions of the EIT report mentioned in the literature review can therefore be supported, however one must argue in how far the survey participants showed their true self and not their ideal self. This applies for the EIT report, where consumers had to make assumptions about their future consumption patterns, but also this thesis, where the consumers had to declare their current ones. This limitation is further elaborated on in a later section.

### ***RQ2: In the eyes of industry experts, how far have pre-COVID-19 lifestyle trends changed?***

Experts see the long-term impact of the COVID-19 crisis more critical and have a level-headed assessment. In general, one can say that there was no clear opinion observable in many aspects, however they do not see that the crisis has made a big difference to existing food consumption lifestyle trends. All of them see changes in the significance of food and believe that the crisis has further accelerated that. In terms of health, they see almost no changes, positive changes in sustainable consumption are only assumed by the half and regarding convenience the assumptions go in very different directions.

### ***RQ3: What are the commonalities and discrepancies between the trends resulting from consumers' food consumption patterns and the perceived trends by industry experts?***

On the one hand side there are a lot of discrepancies between the viewpoints, especially when only considering the hypothesis testing and the judgement of effect (increase, no change, decrease ...) by experts. On the other side, some comments made within the survey and answers given by the experts do align. Both stakeholder groups assume, that the crisis had a positive effect on sustainable eating patterns and shifted the focus on food in general. However, it appears that the experts are not exactly aware of to what extent the significance of sustainability has shifted for consumers, especially for the younger generation. Also, health appears to be more important to consumers than experts assume. The change in the interest is moderate, however only one expert has acknowledged that. About convenience, it is hard to make a judgement, however here, the viewpoints more or less align. Experts are quite unsure about the impact. Overall, they think that consumers still like convenience, however in another way. The

survey showed that there is no change induced by the pandemic, however some comments hint that consumers now spend more time on various food related processes.

## **5.2 Implications for relevant stakeholders**

In the case of this thesis, the implication for relevant stakeholders is pretty much congruent with the outcomes of the empirical research part and the answering of hypotheses. However, one can narrow the research down to the following five implications for the stakeholders.

First, one can say that the pandemic indeed influenced food consumption. It severely affected food consumption lifestyles within several lockdown phases, however also had a long-lasting impact which food industry stakeholders should not neglect. People, especially young consumers care a lot about sustainability – maybe even more than assumed by experts. They are very conscious in several aspects, especially the origin of the products. The closer the products come from, the better. This must not be ignored by restaurant managers but also not the industry. Also in supermarkets, sustainable food products are a necessity. Especially in terms of plant-based food products, which are of high importance to the consumer today and probably even more to the consumer of tomorrow.

A further take away of this thesis is that foodies are on the rise. In general, the crisis made people more conscious about their food consumption lifestyles and have a higher focus on food. Many people are now more aware of quality and combine food consumption with a higher degree of enjoyment. Consequently, one can assume that the convenience trend has changed. It further developed into something like a “premium convenience” because consumers now know more about their food, however, aim to spend enough time enjoying it.

One of the most interesting implications to the stakeholders may be that a health crisis not necessarily accelerates health. At least not to a very high degree. Only some consumers have an increased focus on health effects when choosing their food which they link to the pandemic. Others rather see their age and other individual factors as a contribution to their changed interest. The COVID-19 pandemic and probably any other health crisis that will arise, will never have the decisive force of changing one’s lifestyle as money does. This aspect has been named several times. By experts but also by consumers.

### 5.3 Contribution to research

Overall, one can say this thesis contributes to several parts of consumer behavior research. This is, because the research does not only include a further insight in how far a crisis can change certain habits, but at the same time it also shows how fast a habit become subject of change and how fragile consumer behavior is when normal life is disrupted by a crisis. This thesis generally can be seen as contribution to research due to two aspects.

The first aspect is that during the most intensive parts of the pandemic, several researchers have already focused on post-pandemic food consumption, however this thesis was conducted during a time span, in which the crisis was already declared as over, at least unofficially and in Europe. There were hardly any restrictions left. One can say that this thesis supports of a lot of assumptions that have been made at the beginning of the crisis, as for example by the EIT report, however the results also show that some estimations were wrong. Ginnaneschi (2020) for instance, assumed that the COVID-19 crisis will have an impact on food consumption such as a war conflict, however this is not the case. This estimation probably was based on emotionally loaded claims and this emotionality was already gone at the stage of the pandemic when this thesis was written (Ginnaneschi, 2020).

Secondly, the use of mixed methods. It does not only show one viewpoint but two. The view of consumers and industry experts. This kind of research provides a good set of implications for the relevant stakeholders, which were thoroughly explained in the section above. One also must mention that another interesting aspect of this thesis is that literature has shown that food lifestyles are quite seldomly researched in the context of crises. At least not those types of crises with the nature and scope of the COVID-19 one. This thesis therefore provides a good overview to a very special case.

## 5.4 Limitations of this research

The author must remark that this thesis has a few limitations. Most limitations are based on the quantitative part of the data collection, however there are also a few points that must be mentioned about the qualitative part, the expert interviews.

Concerning the quantitative part, the survey, one must mention the following points which may have influenced the analysis results: The data concerning the food consumption before the pandemic was collected long after the initial start and is based on their own assessment. This could lead to two issues. First, it could be that some responders have already forgotten about their consumption patterns back then, however it may also be possible that not everybody said the truth about the before COVID-19 consumption, because they want to be perceived differently by others or even lie to themselves to be closer to their ideal self. The same can be said about the declarations about their current food consumption patterns. This behavior is also described in the literature review (Duval and Wicklund, 1972). About the participants one can further add that results may have turned out differently if the age distribution was a little bit more balanced.

A more general limitation is that the crisis has not officially been declared as over. This means that one cannot officially speak about “after crisis” consumption. It could still be, that the crisis returns in an even worse extent with a variant that is more fatal than the current omicron variant, which consequently has a more intensive effect on consumption lifestyles. A further point that must be noted, is that another crisis has started to influence the life of Europeans. The war in Ukraine, which also has tremendous effects on people’s consumption patterns due to rising prices and shortages.

As a last limitation one can further mention that due to the scope of research, especially the focus on four different lifestyle trends, only a limited number of questions was possible. Especially in the survey, a lifestyle trend was described with four variables, which is a very small number and not sufficient to make actual generalizations but rather assumptions. This thesis therefore only gives an overview on the trends from a certain angle and shows how different viewpoints can be.

## 5.5 Future research

When speaking about the COVID-19 crisis in combination with food lifestyles, it is not that easy to make a clear assumption about future research. However, the author of this thesis assumes that there will not be a lot of research directed to it in the future. At least if the pandemic continues to lose significance in one's daily life and the media, as it appears to do now. If this is not the case, or in contrary, the COVID-19 crisis gains attention again due to e.g., a very deadly variant, the interest in corresponding research will likely increase. When focusing on the food industry in combination with COVID-19, it is possible that research will rather highlight newly developed businesses or means of conducting business that resulted from the pandemic. However, besides that, it is reasonable that the pandemic has not only started to bore consumers, but also researchers.

Apart from the constant protraction of this crisis, an explanation for researchers' potential loss of interest could be found in the limitations of this thesis, the comments of survey participants, but also the opinion of experts, that humans food consumption may have been altered slightly due to the pandemic, but that there are also several other factors that have influenced the consumption patterns. Personal matters but also other big issues that are happening in this world. One example would be the war in Ukraine. It is to assume that this new crisis will have a bigger impact on food consumption patterns than COVID-19. Another crisis that will be closer looked at in combination with food is undoubtedly the climate/environmental crisis. As research but also this thesis showed, sustainable food consumption patterns are on the rise, and this will continuously be of relevance to researchers. In general, there will always be a crisis happening somewhere, hence there will always be people who are interested in gaining insights in the human behavior that follows.

However, if in the future someone aims to research in the field of lifestyles following a crisis, it is recommendable to concentrate solely on one trend. Especially when additionally focusing on two viewpoints. As already mentioned in the previous limitations section, a trend must be looked at in more detail to make clear statements. The comparison of the viewpoints of consumers and the viewpoints of experts definitely makes sense and provides interesting implications for stakeholders which can be very thought provoking.

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## 7 APPENDICES

### APPENDIX 1: Survey Questions and Results

#### Food consumption before Covid-19

1. Before the pandemic, I was very careful about the health effects of the food products I bought
2. Before the pandemic, I followed a healthy and balanced diet
3. When buying food products before the pandemic, I preferred a lower fat content
4. Before the pandemic, I ate fruits/vegetables/legumes daily

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Nunes et al, 2020; Tudoran et al, 2012; WHO, 2018)*

5. When buying food products before the pandemic, I was influenced by environment & sustainability
6. Before the pandemic, I preferred buying food from a local market/private farmers
7. Before the pandemic, the origin of the product shown on the label was important when choosing a product
8. Before the pandemic, the presence of the organic claim influenced my choice of food products

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Krystallies et al, 2011; Grunert et al, 2019; Bjorndal et al, 2014)*

9. When buying food products before the pandemic, I was influenced by the psychical effort needed to buy and prepare food: the less the better
10. When buying food products before the pandemic, I preferred food that can be prepared and consumed quickly
11. Before the pandemic, I preferred food that required little planning
12. Before the pandemic, at least once a week I ate out in the café or a restaurant

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Nettle, 2019; Ma, Webb & Schwartz, 2021).*

13. Before the pandemic, the quality certification reported on the label was important when choosing a product
14. Before the pandemic, I chose food according to a brand
15. Before the pandemic, I chose food according to the taste
16. When buying a food product before the pandemic, I was very careful about the use of preservatives in food production

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Wilson, Steingoltz & Picciola, 2018; Mehmeti & Xhouxhi, 2014; Tudoran et al, 2012)*

Food consumption after several periods of lockdowns:

17. I am very careful about the health effects of the food products I buy
18. I follow a healthy and balanced diet
19. When buying food, I prefer a lower-fat content
20. I eat fruits/vegetables/legumes daily

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Nunes et al, 2020; Tudoran et al, 2012; WHO, 2018)*

21. When buying food products, I am influenced by environment & sustainability
22. I prefer buying food from a local market/private farmers
23. The origin of the product shown on the label is important when choosing a product
24. The presence of the organic claim influences my choice of food products

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Krystallies et al, 2011; Grunert et al, 2019; Bjorndal et al, 2014)*

25. I am influenced by the psychical effort needed to buy and prepare food: the less the better
26. I prefer food that can be prepared and consumed quickly
27. I prefer food that requires little planning
28. At least once a week I eat out in a café or a restaurant (if the lockdown situation allows it)

*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Nettle, 2019; Ma, Webb & Schwartz, 2021).*

29. The quality certification reported on the label is important when choosing a product
30. I choose food according to the brand
31. I choose food according to the taste

32. When buying a food product, I am very careful about the use of preservatives in food production

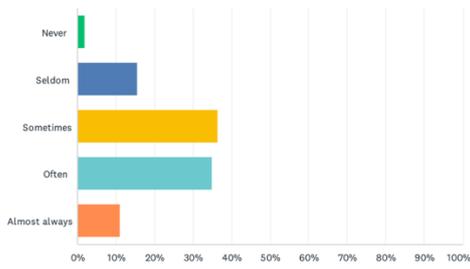
*Sources: (Corallo et al, 2019; Onwezen et al, 2012; Wilson, Steingoltz & Picciola, 2018; Mehmeti & Xhouxhi, 2014; Tuderan et al, 2012)*

General/ Demographical Questions

33. In general, do you think that the Covid-19 crisis has influenced your food consumption patterns?
34. How old are you?
35. Gender: How do you identify?
36. Is there anything you would like to add about your food consumption patterns?

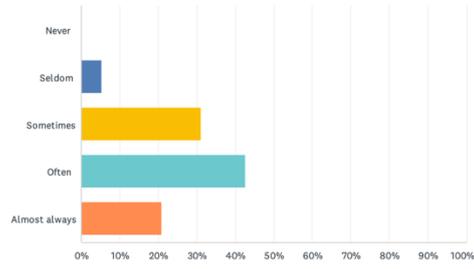
Q1 Before the pandemic, I was very careful about the health effects of the food products I bought.

Answered: 154 Skipped: 0



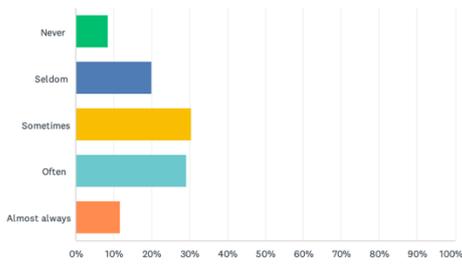
Q17 I am very careful about the health effects of the food product I buy.

Answered: 148 Skipped: 6



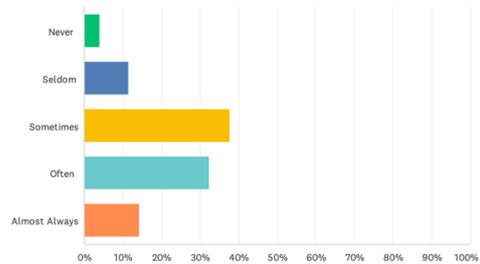
Q2 Before the pandemic, I followed a healthy and balanced diet

Answered: 154 Skipped: 0



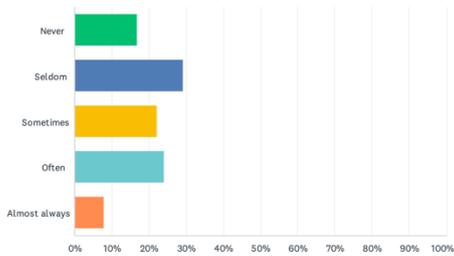
Q18 I follow a healthy and balanced diet

Answered: 148 Skipped: 6



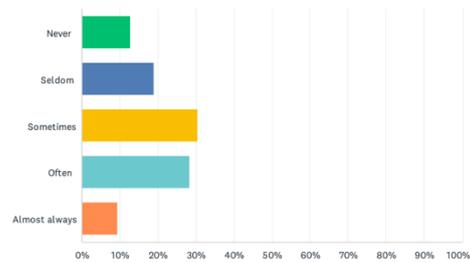
Q3 When buying food products before the pandemic, I preferred a lower-fat content

Answered: 154 Skipped: 0



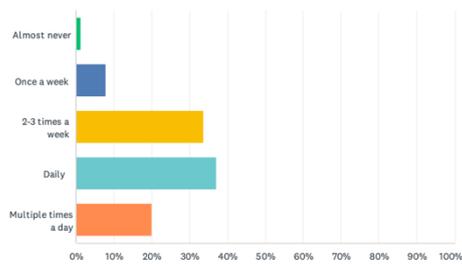
Q19 When buying food products, I prefer a lower-fat conte

Answered: 148 Skipped: 6



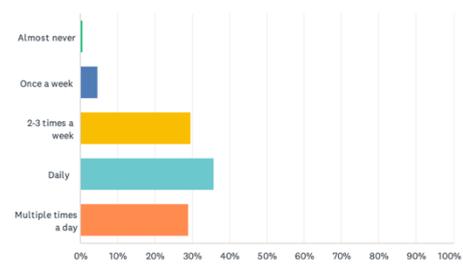
Q4 Before the pandemic I ate fruits/vegetables/legumes ...

Answered: 154 Skipped: 0

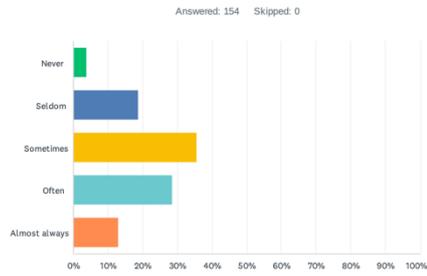


Q20 I eat fruits/vegetables/legumes ...

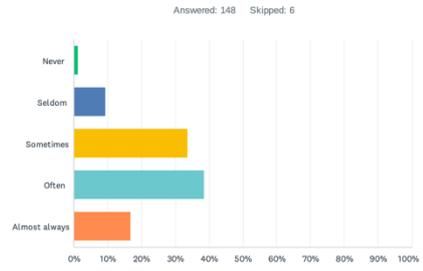
Answered: 148 Skipped: 6



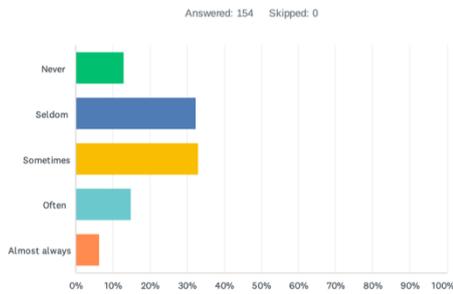
Q5 When buying food products before the pandemic, I was influenced by the environment & sustainability issues



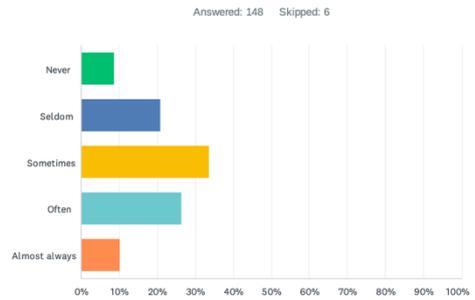
Q21 When buying food products, I am influenced by the environment and sustainability issues



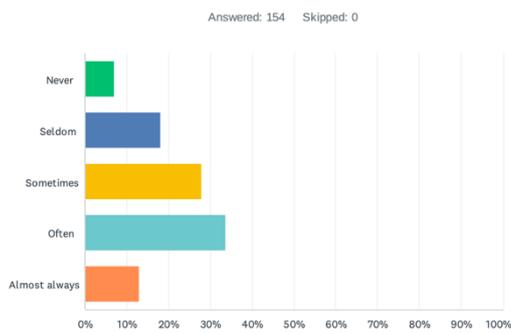
Q6 Before the pandemic, I preferred buying food from a local market/private farmers



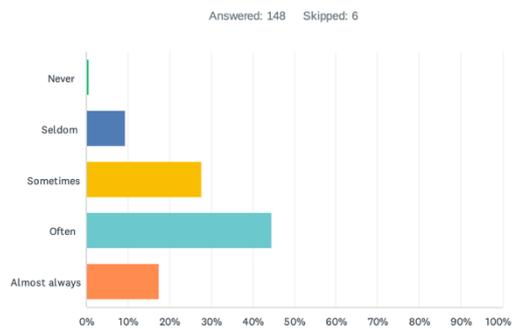
Q22 I prefer buying food from a local market/private farmers



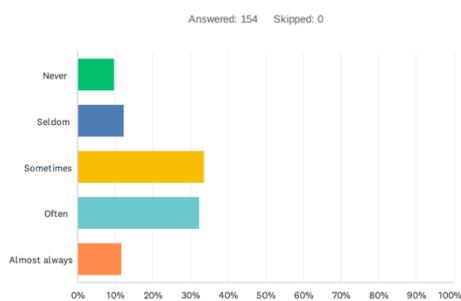
Q7 Before the pandemic, the origin of the product shown on the label is important when choosing a product.



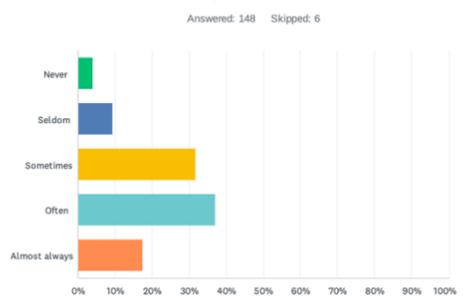
Q23 The origin of the product shown on the label is important when choosing a product.



Q8 Before the pandemic, the presence of the organic claim influenced my choice of food products

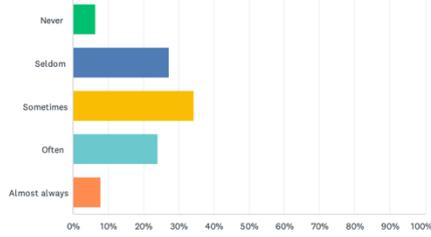


Q24 The presence of the organic claim influences my choice of food products



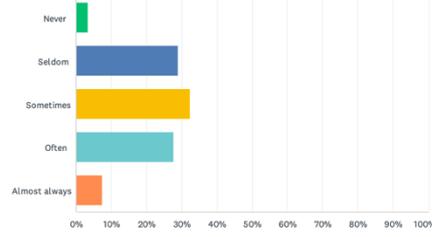
Q9 When buying food products before pandemic, I was influenced by the physical effort needed to buy and prepare food: the less effort the better.

Answered: 154 Skipped: 0



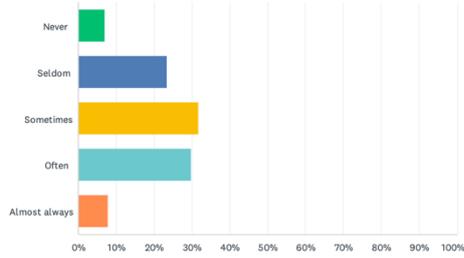
Q25 I am influenced by the physical effort needed to buy and prepare food: the less effort the better.

Answered: 148 Skipped: 6



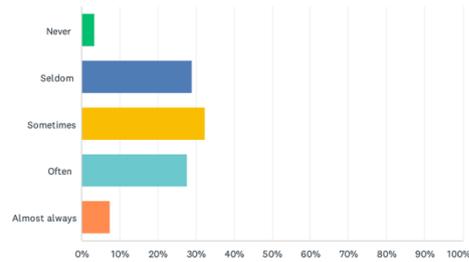
Q10 Before the pandemic, I preferred food that can be prepared and consumed quickly

Answered: 154 Skipped: 0



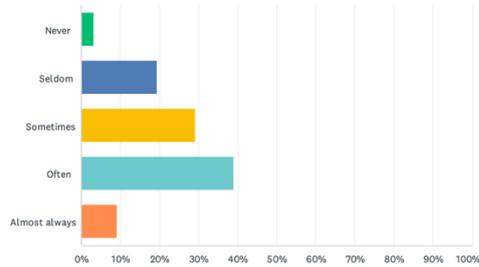
Q26 I prefer food that can be prepared and consumed quickly

Answered: 148 Skipped: 6



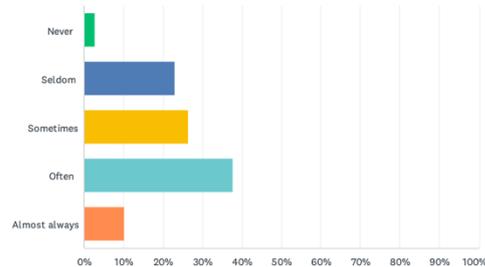
Q11 Before the pandemic, I preferred food that required little planning

Answered: 154 Skipped: 0



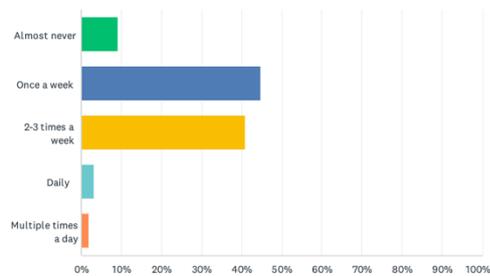
Q27 I prefer food that requires little planning

Answered: 148 Skipped: 6



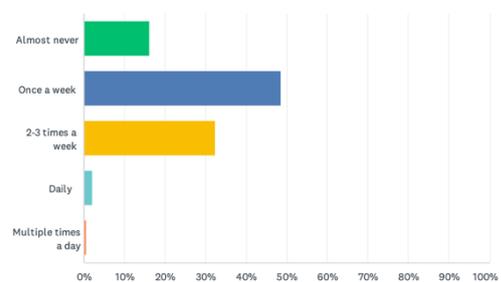
Q12 Before the pandemic, I chose to eat out in a café or restaurant ...

Answered: 154 Skipped: 0



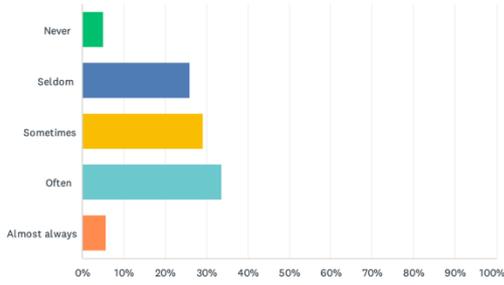
Q28 I prefer to eat out in a café or a restaurant ...

Answered: 148 Skipped: 6



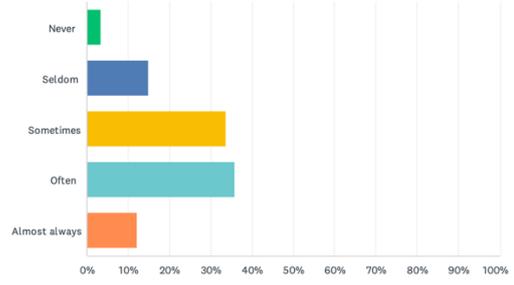
Q13 Before the pandemic, the quality certification reported on the label was important when choosing a product.

Answered: 154 Skipped: 0



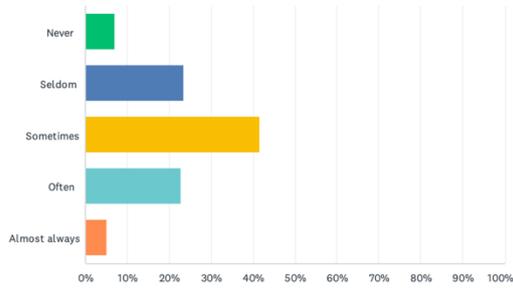
Q29 The quality certification reported on the label is important when choosing a product.

Answered: 148 Skipped: 6



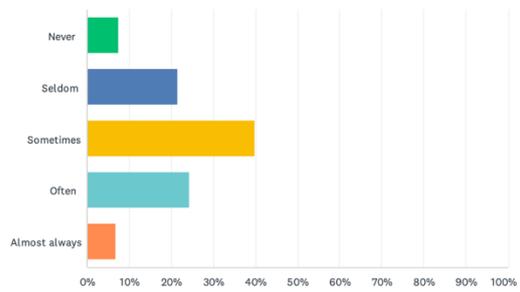
Q14 Before the pandemic, I chose food according to the brand

Answered: 154 Skipped: 0



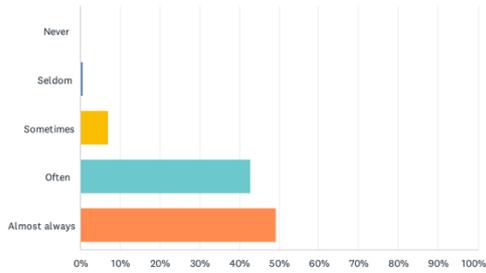
Q30 I choose food according to the brand

Answered: 148 Skipped: 6



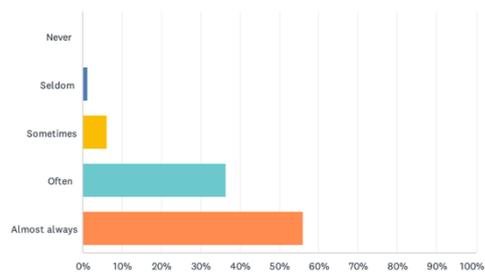
Q15 Before the pandemic, I chose food according to the taste

Answered: 154 Skipped: 0



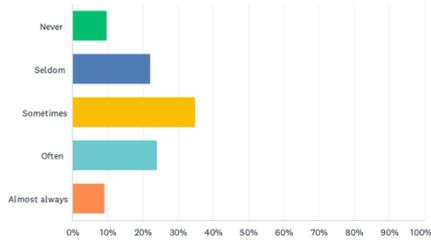
Q31 I choose food according to the taste

Answered: 148 Skipped: 6



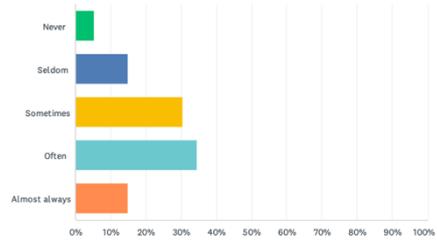
Q16 When buying a food product before the pandemic, I was very careful about the use of preservatives in food production

Answered: 154 Skipped: 0



Q32 When buying a food product, I am very careful about the use of preservatives in food production

Answered: 148 Skipped: 6



## APPENDIX 2: EXPERT INTERVIEW TRANSCRIPTS

### Respondent A: Female 2 Michelin star restaurant owner and manager

Interviewer	When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on your business and the Austrian F&B scene in general?
Respondent	To be honest at the beginning we thought this entire thing would only take about two weeks. After we realized that this would have a great impact on our business, we were shocked. We have more than 100 employees, so closing the restaurant in Vienna and our country location was very hard. Soon we realized that we must become creative to do the best for our employees and to get not bored ourselves. Still, we were very afraid and most high-class restaurant owners as well.
Interviewer	Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption among your guests? - Could you please briefly describe those?
Respondent	You mean before Covid-19? Of course, there were a lot of developments in restaurant food consumption observable. As you know Heinz (A's husband) always has a high focus on products/vegetables that grow regionally, and we could really feel that this was more and more appreciated by our customers and also by the entire fine dining scene. So, I think that consumers generally got more conscious in recent years. Not only concerning sustainability but also health.
Interviewer	Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.
Respondent	Yes, we did, as I just pointed out people have become more conscious in this field, however since we are not an everyday restaurant and people often come to us on special occasions, people often seem to let their diet restrictions go and treat themselves with whatever our menu has to offer.
Interviewer	Have you noticed consumers putting more significance on sustainability and environmental issues? Examples for an increased interest in sustaina-

	ble food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general.
Respondent	Yes, as already pointed out we are doing this anyways. Our entire menu is built around that, so people necessarily must be interested, or at least be open towards food that is more sustainable. Who eats at our place automatically eats sustainable
Interviewer	Have you noticed consumers putting more significance on convenience?  Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.
Respondent	Do you mean in general or our customers? In general, yes of course but this does not apply to our restaurant – we only had a small webshop before the pandemic has started.
Interviewer	Have you noticed consumers putting more significance on quality, indulgence or luxury concerning food consumption? Examples could be a diversified set of customers or the customers being more appreciative and relaxed during their stay.
Respondent	I would say that our customers have diversified yes, so apparently more and more people want to do something good to themselves. However, despite that, we always had good bookings and very happy customers. Who comes to our restaurant, looks for quality anyway? They are very appreciative towards our work.
Interviewer	Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?  <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondant	That's really hard to say. I indeed do think that the pandemic has made people think more. Think more about themselves, the environment, and

	<p>the future. During the most intensive parts of the pandemic people spend a lot of time at home doing that. On the other hand, I think people thought more about their future in a “what can I do, to have a good future” context and on the other side in a “you only live once” context. So, people want to live their life to the fullest. I don’t really see new trends evolving, at least not based on lifestyles.</p>
Interviewer	<p>Just to make a quick round up. In general, do you think the interest in healthy food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>I think that the interest has slightly increased, however people in Austria would never let their Schnitzel go. People indulge more than ever now. They are so happy to be able to eat their favorite food again.</p>
Interviewer	<p>Do you think the interest in sustainable food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>Slightly increased probably, but I don’t know in how far this is based on the pandemic. As I said earlier, I think the pandemic made people think. And this probably also applies to people’s lifestyle choices.</p>
Interviewer	<p>Do you think the interest in convenient food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>Increased</p>

Interviewer	<p><u>In general, do you think the interest in qualitative/pleasure food consumption has:</u></p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>I think people enjoy their food more and generally care more about food. So, I think that the interest also has increased. Also, I think that the interest in quality goes hand in hand with the interest in health and sustainability. The increased focus on food makes one more conscious about food choices in general. It is all connected.</p>
Interviewer	<p>We are already done. Thank you very much for your time – I know it is very limited.</p>

### **Respondent B: Female restaurant manager of a countryside restaurant**

Interviewer	<p>When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on your business and the Austrian F&amp;B scene in general?</p>
Respondent	<p>My family and I are always very much invested with news. When the first cases broke in china, we knew that this would be huge and sooner than later would also affect Austria and consequently also our restaurant. We therefore tried to be as prepared as possible.</p>
Interviewer	<p>Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption among guests?</p> <ul style="list-style-type: none"> <li>- Could you please briefly describe those?</li> </ul>
Respondent	<p>Although we are a typical Austrian restaurant, that usually serves a lot of meat, we could really see that our vegetarian and vegan options have become more popular. We always tried our best to incorporate these new</p>

	consumption habits. Also, before the pandemic we have tried out many recipes with influences of other countries cuisines that offer a greater choice of vegetarian dishes.
Interviewer	Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.
Respondent	Not really. We serve amazing desserts and have one of the biggest wine menus in the country. Our guests know that and visit us for exactly those things. I don't think we have witnessed a mentionable change in the last five years. Okay yes, there are more people that go for the lighter version now.
Interviewer	Have you noticed your customers and consumers in general to put more significance on sustainability and environmental issues? Examples for an increased interest in sustainable food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general.
Respondent	Yes definitely. Therefore, we also have started to include the origin of our food products in the menu. In the menu people can directly see where the meat comes from. We try to be as sustainable as possible. However, this has an influence on our prices. Most of our regular guests come anyways. To be honest, I don't think they would come if they wouldn't have changed some of their consumption patterns themselves.
Interviewer	Have you noticed consumers putting more significance on convenience? Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.
Respondent	Of course, takeaway and delivery have become very important in recent years. I do think that this applies more to urban areas than rural areas. Here on the countryside everything is a little bit slower paced. We have never offered any takeaway or delivery products. That does not fit to our vision, but I also don't think there would be enough orders.

Interviewer	Have you noticed your customers putting more significance on quality, indulgence or luxury concerning food consumption? Examples could be a diversified set of customers or the customers being more appreciative and relaxed during their stay.
Respondent	In our restaurant not really – guests were as happy as ever. However I am sure that in general the interest in food has increased.
Interviewer	Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends? <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondent	I don't think that you can generalize that. Apart from that I think that there are other things that have influence food consumption as well. Not just COVID-19. The trends have probably been influenced slightly by the pandemic, but it is hard to make any assumptions about that. We personally have not seen any particular changes to pre covid times.
Interviewer	Just to make a quick round up. In general, do you think the interest in healthy food consumption has: <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	No change. On the contrary, I think people enjoy more and don't think that much about their calory intake. At least not when visiting restaurants.
Interviewer	Do you think the interest in sustainable food consumption has: <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> </ul>

	<ul style="list-style-type: none"> <li>• Increased</li> </ul>
Respondent	Maybe this trend has slightly increased. But again, I think there are other factors involved as well.
Interviewer	<p>Do you think the interest in convenient food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	Probably people have accustomed to delivery services during the pandemic. Therefore, I would say the interest has slightly increased.
Interviewer	<p>In general, do you think the interest in qualitative (pleasure) food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	I think the pandemic has people made people enjoy their lives more. Therefore, they also search for products that are high of quality. At the same time, I think that people are not afraid of their guilty pleasure. However, one can combine pleasure and quality easily. I would say this trend has increased.
Interviewer	Thank you very much for your time and the interview.

**Respondent C: Male restaurant management professor with a tavern in the family**

Interviewer	When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on the Austrian F&B scene in general?
Respondent	I was nervous; I have to say that. To be honest, nervous in a surprisingly good way (laughing). But at the same time, I knew that this would lead to crazy few weeks. Little did I know.
Interviewer	Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption? - Could you please briefly describe those?
Respondent	Sure, I can name you a few that come to my mind: - Internationalization – including more cuisines of other countries - Sustainability – I don't have to tell you anything about that. I think I know double as many vegans now than I did five years ago - Delivery services – also here in Graz the offer has become quite extensive.
Interviewer	Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.
Respondent	Yes, I think think this trend goes hand in hand with the sustainability trend. What is good for the environment is good for us. Less meat, more plant-based products, and a generally balanced diet. And of course – less sugar. Always less sugar. It has become very seldom that people order an ordinary coke and not a coke zero, for example.
Interviewer	Have you noticed consumers putting more significance on sustainability and environmental issues? I think we can leave this question out, I already know your answer to it, or is there anything you might would like to add?
Respondent	Not really, I would not know what to add. Sustainability is a big thing. In restaurants but also increasingly in supermarkets. However, there is a lot of

	air to fill and there are still a lot of people to convince that without a more sustainable lifestyle the world looks different soon.
Interviewer	<p>Have you noticed consumers putting more significance on convenience?</p> <p>Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.</p>
Respondent	<p>Yes, I have already referred to that in a prior question. I think everything is more fast paced. People have less time on their hands. And this has made this trend grow. If this is a trend for the future – I don't know. I am thinking about the new generations who appreciate a good work-life balance. They want to spend a lot of time on those things they enjoy, and I think food is of importance to many. And I also think that the convenience trend is something that emerged in the fast-paced world of generation X and especially generation Y. I think convenience will not die out; it will further develop into something that fits to generation Z's standards.</p>
Interviewer	<p>Have you noticed consumers putting more significance on quality, indulgence or luxury concerning food consumption?</p>
Respondent	<p>Here I think about foodies or at least those who would like to be so. This is also very much influenced by social media. Everybody wants to be a foodie or show how much they are involved with food. This I have noticed. People want to show off, that is also why they also spend more money on food.</p>
Interviewer	<p>Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?</p> <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondent	<p>To be honest, I hope I do not ruin your thesis with this answer, but I don't think that the pandemic has influenced any food lifestyle trends in the long run. In the short run, yes. During the pandemic everybody changed their consumption habits. Some have become super healthy, did endless workouts, and prepared their own meals, some, including me, have absolutely indulged and ate whatever they wanted to. I think I have never ever</p>

	<p>been unhealthier than during spring/summer 2020. Now that my daily life has become the same as before the pandemic, I returned to my old food habits. I may have reduced my meat consumption a bit, but this had nothing to do with the pandemic.</p>
Interviewer	<p>Just to make a quick round up. In general, do you think the interest in healthy food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased interest</li> <li>• Slightly decreased interest</li> <li>• No change</li> <li>• Slightly increased interest</li> <li>• Increased</li> </ul>
Respondent	No change
Interviewer	<p>Do you think the interest in sustainable food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased interest</li> <li>• Slightly decreased interest</li> <li>• No change</li> <li>• Slightly increased interest</li> <li>• Increased</li> </ul>
Respondent	<p>No change. Maybe in our small bubble, but there are so many people who simply cannot afford to act more sustainable. Also, this is a matter of education. In many societal groups sustainability is not even talked about.</p>
Interviewer	<p>Do you think the interest in convenient food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>Here I am not sure to answer with no change or slightly increased, since I could imagine that people have become a bit lazy during the pandemic. I still go with no change.</p>

Interviewer	Do you think about the interest in a more qualitative food consumption has: <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	Here I would say slightly increased interest. The foodie generation is on a rise, and I think here the pandemic really had an influence.
Interviewer	I thank you for your time and hope to see you soon!

#### **Respondent D: Male restaurant operations manager of several restaurants**

Interviewer	When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on your businesses and the Austrian F&B scene in general?
Respondent	Well, I was constantly checking the news. I knew that this thing what happened in China was a big issue from the start. When the first cases hit Europe the scope of this pandemic really got to me. We instantly knew that we will probably have to close everything, we just did not know when. We tried to stay optimistic, for the sake of our employees but also us to not get totally crazy ourselves. When the first talks about a lockdown in Austria started, we started to think about enhancing our delivery options. Not that easy for breakfast restaurants. But we were not alone, we somehow managed it. What I really liked at that time was this collective thinking in the F&B industry. We knew that this situation would end eventually, however in the meantime we had to be there for one another.
Interviewer	Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption among guests? - Could you please briefly describe those?
Respondent	As we have several breakfast or brunch locations, we could really see the development of more and more people preferring plant-based milk options. Also, in the restaurants where we serve lunch and dinner, our menu has developed quite a bit in recent years. At the beginning we had way more meat options. After a time, we realized that this is not exactly what

	our customer group is looking for. When we open new restaurants nowadays, we develop our menu to be at least $\frac{3}{4}$ vegetarian, with a lot of vegan options among them. Apart from that it's hard to say. Another big thing that we observed is that consumers focus more on intolerances.
Interviewer	Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.
Respondent	Apart from the intolerances not too much. The locations where a lot of young people are visiting, are also the locations where we serve the most meat less options, the meals are automatically healthier. An aubergine with feta is automatically healthier than a Butterschnitzel with potato-puree. In general, the fitness hype is very much observable. I noticed an increasing interest in low-sugar dishes, veggies, smoothies, and things like that. I would also say that there are less sweet tooths than there used to be. Especially with regards to coffee. I remember the old movies where people used to put so much sugar in it that you had the feeling that the entire cup is full. Nowadays that's something I see very seldomly.
Interviewer	Have you noticed consumers putting more significance on sustainability and environmental issues? Examples for an increased interest in sustainable food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general. You don't have to go too much into detail because you have already answered that briefly.
Respondent	Yes, that is a big topic among our guests. But sometimes I am wondering if people order the plant-based options because it is "cool" and not because it is the best thing to do. I have to say, we try to be as regional as possible, however this is not always possible – especially with regards to fish. In some locations fish out of the Mediterranean Sea does not work anymore and in other restaurants people don't seem to care.
Interviewer	Have you noticed consumers putting more significance on convenience? Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.

Respondent	<p>Yes. You can feel that all over Vienna. All those different delivery providers, online supermarkets and whatever in the meantime exists. This was already a big thing before the pandemic and now even more. However, I have to say, as you know I am not the biggest fan of delivery services. There are so many people who don't know that about 30% of the price they pay when ordering take away is going to the delivery and consequently away of the money the restaurant gets. So, I am very happy that there are still a lot of people who prefer eating out in restaurants or at least pick up the food themselves.</p>
Interviewer	<p>Have you noticed your customers putting more significance on quality, indulgence or luxury concerning food consumption? Examples could be a diversified set of customers or the customers being more appreciative and relaxed during their stay.</p>
Respondent	<p>No, not really – at least not since I work in the gastronomy or am a consumer myself. Appreciative and relaxed guests – that would be nice. (laughs). However, in general I think that more and more people have become foodies, so I think that the individual significance of food has changed.</p>
Interviewer	<p>Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?</p> <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondent	<p>I think the pandemic had an effect, yes – but this effect is shrinking the more the pandemic, or at least the entire lockdown and restrictions period goes in the past. Concerning lifestyles, I cannot really see a new trend. During the pandemic there were a lot of pop-ups. This is still the case today. I think this is because people are eager to try out new things and are on the search for new experiences. But this probably is no lifestyle trend.</p>

Interviewer	<p>Just to make a quick round up. In general, do you think the interest in healthy food consumption has?</p> <ul style="list-style-type: none"> <li>• Decreased interest</li> <li>• Slightly decreased interest</li> <li>• No change</li> <li>• Slightly increased interest</li> <li>• Increased</li> </ul>
Respondent	<p>I see no change. Maybe people cook healthier at home but when I think about my consumption habits that is not the case. When everything went back to normal, maybe at the beginning people spend more time thinking about fueling their body with good things. On the other side however, after we reopened, we had the best alcohol consumption in a long time. Now the alcohol consumption is pretty much back to how it was before the pandemic. Maybe less people who drink alcohol in their lunch break – but I don't think that's based on the pandemic.</p>
Interviewer	<p>Do you think the interest in sustainable food consumption has?</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>Maybe slightly increased. As I said, more people chose the plant-based vegetarian option, but I think this is more based on a general trend but not due to the COVID-19 crisis.</p>
Interviewer	<p>Do you think the interest in convenient food consumption has?</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>

Respondent	At first, I think it has slightly decreased because some people were still very careful about restaurant visits and going out in general and therefore still prepared their food at home. However recently I think those people more and more go out and even go an extra mile to enjoy food. I don't know, during the pandemic I thought that convenient food consumption would be more important than ever, but I think people are now willing to spend more time on food. I think it has decreased.
Interviewer	In general, do you think the interest in qualitative/pleasure food consumption has? <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	Following up to my previous answer, I think it has even more increased to pre-crisis times. People value good food and probably this trend is the countertrend to convenience. What I must add here, and I wanted to add this at different stages in this interview that you should not forget about the financial part. At the end, people's lifestyle very much depends on money. Everything is about the money. The crisis has emptied the pockets of many. Also, if people would love to buy the more qualitative product or go out and have a fancy dinner, many people cannot afford it. But just speaking about the interest, yes, I think it has increased.
Interviewer	Very interesting. Thank you very much for your time!

**Respondent E: Male online chief editor who publishes in several food related magazines**

Interviewer	When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on the Austrian F&B scene in general?
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Respondent	<p>I was afraid I would have nothing more to write about. (laughs)</p> <p>No, in all honestly, I really was worried for the entire industry, at the same time I knew people always want to go out, eat and be with others. In every situation, also the tough ones, people come together and share meals with each other. So, I did not think that this was the end of gastronomy or something.</p>
Interviewer	<p>Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption patterns?</p> <ul style="list-style-type: none"> <li>- Could you please briefly describe those?</li> </ul>
Respondent	<p>Sustainability or course, maybe people being more health focused and of course also the delivery and fast-food trend. Besides that, there is nothing that comes to my mind.</p>
Interviewer	<p>Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.</p>
Respondent	<p>Yes, but at the same time no. Of course, due to the entire fitness and wellness trend people look more on their body. And this goes hand in hand with a stricter diet. However, I think that people are stricter to themselves at home than in restaurants. Sure, we also incorporated people's health focus in our articles, as for example reporting about new light cuisine restaurants in Vienna, but at the same time people love to indulge in restaurants, so we generally concentrate on that. Just to give you an example, an article about gin is always more popular than an article about celery juice.</p>
Interviewer	<p>Have you noticed consumers putting more significance on sustainability and environmental issues? Examples for an increased interest in sustainable food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general.</p>
Respondent	<p>Yes, I think this is something that was relevant for the entire food industry for quite some time now. A great number of restaurants focus on regional products on their menus and offer vegan/vegetarian options. Same goes for</p>

	supermarkets. This is also important for the customers nowadays. The consumers want that. There is no new opening without the words “regional”, and “seasonal” on the official press releases. I always smirk when I see that.
Interviewer	<p>Have you noticed consumers putting more significance on convenience?</p> <p>Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.</p>
Respondent	Yes sure, that is hard to miss.
Interviewer	<p>Have you noticed consumers putting more significance on quality, indulgence or luxury concerning food consumption? Examples could be a diversified set of customers or the customers being more appreciative and relaxed during their stay.</p>
Respondent	That is basically the consumer group I write for. People who love to eat, who don't mind paying a little bit more for a good quality meat or a fancy dinner with a great view. I think food has become a big topic nowadays, not just due to the pandemic. There are foodies everywhere and social media and the media in general increase this effect even more.
Interviewer	<p>Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?</p> <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondent	I think people go out more. They have enough of cooking and exploring new recipes and prefer not just to go to their local tavern more often but also new restaurants. Now there are at least three mentionable restaurant openings a week we can write about. That would not be possible if people would stay at home. So, I think the interest in food even has increased. I don't think the pandemic has influenced the health focus of people. Maybe at first but now it feels people do not even think any more about the past health crisis. The convenience also did not grow, I guess. Stayed the same pretty much in comparison to pre-crisis times.

Interviewer	<p>Just to make a quick round up. In general, do you think the interest in healthy food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	I think that there was no change. Or hardly any change.
Interviewer	<p>Do you think the interest in sustainable food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>I would say this trend slightly increased. I think this is due to people spending a lot of time in supermarkets during the pandemic and therefore got more conscious about where the products come from. They also spend more time on local farmers markets or made visits directly to farmers. I personally did that as well. So, I think this has and will stay in people's minds for a long time. This also has an influence on restaurants. People rather prefer something that has been produced or lived 100km away and not 10.0000km away</p>
Interviewer	<p>Do you think the interest in convenient food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>I do not see a reason why people would be wanting to be more convenient – at least not due to the pandemic. I mean maybe a little bit when doing grocery shopping. When you think about Gurkerl for instance, online supermarkets are on the rise. Gurkerl has grown a lot and I think many people</p>

	<p>tried it out first during the pandemic and never stopped ordering there. But on the other side I think people cook more and stopped buying that much convenience food products. I think that “ready to eat” dishes you just must put into the microwave are not as popular anymore. So, I think these two aspects pretty much even each other out. So, no I don’t think that there is a change due to COVID-19.</p>
Interviewer	<p>In general, do you think the interest in quality/pleasure food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>Increased. People care more about food due to the pandemic. I think we can say that. But it is all about the money. Many people may care more about the food but cannot afford it. You have to think about that too.</p>
Interviewer	<p>Thank you, have a good day!</p>

**Respondent F: Male producer of Austria’s most important restaurant guide**

Interviewer	<p>When the first COVID-19 cases hit Austria, what were your thoughts about the potential impact on the Austrian F&amp;B scene in general?</p>
Respondent	<p>Since I always follow the news very closely and I am a rather pessimistic person, I thought we could stop working right away. No sense in producing a restaurant guide if restaurants are not open.</p>
Interviewer	<p>Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable among restaurant guests?          - Could you please briefly describe those?</p>
Respondent	<p>I think that people focused a lot more on their health than they used to do ten years ago. So, restaurants started to integrate more lighter options. Less meat, less sugar and less fat. Then of course the environment has also become a great topic. Also, in the restaurant industry a lot has changed. We cannot consume as we did 50 years ago. Lobster from the U.S., lamb from</p>

	New Zealand and Steak from Argentina. That's simply not possible anymore. Or at least it should not be possible. Guests but also restaurants know that and correspondently the offer has changed. At least in most restaurants. I think the same goes for at home food consumption.
Interviewer	Have you noticed consumers putting significance on health-related issues? Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.
Respondent	Since I don't work in a restaurant, I cannot really answer that, but I think this is the case. Also, at home people care more about their general health. There are so many studies that show what is healthy and what not and I think consumers have definitely adapted to that.
Interviewer	Have you noticed consumers putting more significance on sustainability and environmental issues? Examples for an increased interest in sustainable food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general.
Respondent	Yes, as already mentioned this was and is the case. The rise of veganism is also a good example for that.
Interviewer	Have you noticed consumers putting more significance on convenience?  Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.
Respondent	Yes, sure.
Interviewer	Have you noticed consumers putting more significance on quality, indulgence or luxury concerning food consumption?
Respondent	Yes, I think quality is a big thing nowadays. People want to have the best experience while consuming food. This does not only apply to fine dining restaurants but also fast-food locations and of course food consumption at home. Fast-food locations as well since there are so many high-quality and

	higher priced fast-food locations in Vienna nowadays. This would not be possible if people would still only want their classical, low quality fast-food.
Interviewer	<p>Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?</p> <ul style="list-style-type: none"> <li>• Have they become more/less prevalent, and can you even think of the newly evolving trends?</li> <li>• How do you think, what is the reason behind those changes?</li> </ul>
Respondent	<p>I don't think that the pandemic had long-term influences on food consumption. When people eat healthier now than 2 years ago it is because they want a good body for summer or generally lose a few kilograms. When people eat more sustainable it is due to the climate catastrophes that are happening around the globe. The pandemic only influenced food consumption lifestyles during the pandemic. Not after it. Now as everything is back to normal everybody has several individual influences that have little to do with COVID-19. I mean, there are always exceptions to everything, and I am sure that there are some people who are still afraid of the virus and who want to protect their health with healthy food products – but that's just a small number of people. At the end, now that everybody had omicron, it just feels like a classical virus disease that happens every winter. And this is what people think of.</p>
Interviewer	<p>Just to make a quick round up. In general, do you think the interest in healthy food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	No change.

Interviewer	<p>Do you think the interest in sustainable food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	No change.
Interviewer	<p>Do you think the interest in convenient food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased interest</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	No change
Interviewer	<p>In general, do you think the interest in qualitative/pleasure food consumption has:</p> <ul style="list-style-type: none"> <li>• Decreased</li> <li>• Slightly decreased</li> <li>• No change</li> <li>• Slightly increased</li> <li>• Increased</li> </ul>
Respondent	<p>No change, although I think that the general interest in food and restaurants has grown. Okay, thinking more about it, I change my answer to slightly increased. The crisis has changed the focus on food. I think that this is the only thing that the pandemic has changed. The pandemic has made people buy the more expensive bottle of wine, the better chicken and made the consumer generally more interested in the quality. At least in our bubble. Quality of course comes with a cost which is not affordable by everybody.</p>
Interviewer	<p>I see. Thank you very much and thank you very much for your time, I am going to end the interview here.</p>

## APPENDIX 3: INTERVIEW GUIDELINE

### Question 1: (if applicable to the expert)

When the first Covid19 cases hit Austria, did you initially expect this illness to impact your business and the country's food culture? When the first Covid19 cases hit Austria, what were your thoughts about the potential impact on your business and the Viennese/Austrian gastronomic scene in general? What was your initial guess about the duration of the crisis?

### Question 2:

Thinking of pre-pandemic times, could you think of the food lifestyle trends that were observable in food consumption among restaurant guests?

- Could you briefly describe those?
- If applicable, have you incorporated them in your food offerings?

### Question 3 – Clarifying Questions:

The following questions regard food consumption trends that have emerged in the years before the pandemic. The questions focus on 4 food consumption trends that are: Health, Sustainability, Convenience, and Indulgence.

#### Clarifying Question (1)

Have you noticed your customers putting more significance on health-related issues?

Examples for an increased interest in healthy food consumption are a decreased sugar/fat/carbs intake, an increased interest in meals that are generally considered to be healthier, less alcohol consumption etc.

Clarifying Question (2)

Have you noticed your customers putting more significance on sustainability and environmental issues? Examples for an increased interest in sustainable food consumption are less orders of fish and meat dishes or an increased interest in the food's origin and the demand of regional produced foodstuff in general.

Clarifying Question (3)

Have you noticed your customers putting more significance on convenience?

Examples for convenience are an increased interest in eating out, saving time but also an increasing demand of Take Away/Delivery products.

Clarifying Question (4)

Have you noticed your customers putting more significance on quality, indulgence or luxury concerning food consumption? Examples could be a diversified set of customers or the customers being more appreciative and relaxed during their stay.

**Question 4:**

Concerning the previously mentioned topics of Health, Sustainability, Convenience, and Pleasure, in your opinion, how did the pandemic impact those food consumption lifestyle trends?

- Have they become more/less prevalent, and can you even think of the newly evolving trends?
- How do you think, what is the reason behind those changes? / What facilitated those changes?

**Question 5 – Clarifying Questions:**

Interest in healthy food consumption:

- Decreased interest
- Slightly decreased interest
- No change
- Slightly increased interest
- Increased

Interest in Sustainability and Environment:

- Decreased interest
- Slightly decreased interest
- No change
- Slightly increased interest
- Increased

Interest in Take Away/Delivery:

- Decreased interest
- Slightly decreased interest
- No change
- Slightly increased interest
- Increased

Interest Pleasure (Quality and Indulgence):

- Decreased interest
- Slightly decreased interest
- No change
- Slightly increased interest
- Increased