Consumers Perception of Quality Labels on Local Food in Germany

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To What Extent do German Consumers Take Labels, Which Indicate the Origin of a Product, into Account When Buying Local Foods?

A Survey Taken by Germans to Discover their Opinion on Local Food Labelling

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Preface

After living in three different neighboring countries of my home country during the last three years, I found my passion in the topic of local foods. I saw many differences in the range of products in these different countries when visiting the supermarket or the local farmers markets. This led me to the idea to conduct my study on local food in the country I was born and raised in to see how local food is perceived here and what the chances are to create a more locally sourced food system.

I would like to thank my thesis coach, my university professors and everyone involved in this research for their support, knowledge, guidance, and experience. I am grateful for all the possibilities I had during this study and hope to be able to apply the gained knowledge in my professional career.

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Summary

This thesis is written with the purpose of getting a better understanding of German consumers opinion on different local food labels. The information is useful for German retailers and local food producers since it provides and insight into the consumers demand for local food and the according information through labeling. Particularly with regard to the PDO and PGI labels, the Regionalfenster label and the 14 German quality signs. To get this information a quantitative research has been carried out by obtaining data from 248 German consumers through an online survey.

German consumers define local foods as originating from the region they are living in. Urban living and younger consumers have a slightly wider view on the originating area. Consumers prefer all production steps to take place close by and mainly purchase their local foods in supermarkets and partly in farm shops, organic shops, and farmers markets. Younger consumers and consumer living in urban areas purchase more often local foods at supermarkets than other groups. The freshness, healthiness and seasonality mainly motivate consumers to purchase local foods followed by the reduced environmental impact of those products. Consumers prefer to be informed on the origin of a product by a sign on the packaging directly. German consumers are mostly familiar with the German quality signs and find those helpful when looking for local foods. The Regionalfenster and PDO/PGI labels are much less known by consumers, but the Regionalfenster is found to be helpful or partly helpful by the majority of consumers.

This shows that quality signs are demanded by German consumers and have potential on the German market. German retailers are recommended to offer products from the region they are operation in and inform consumers on the origin and the labels used on the products. Local food producers in Germany are recommended to try undertaking as many production steps as possible in the region and inform consumers on the label accordingly. Local foods targeted to younger consumer as well as to more rural living consumers can be marketed with a wider area span than the own region. Furthermore, the 14 German quality signs are a great opportunity for local food producers since these labels are well known and perceived as helpful by the consumer and could consequently lead to a rise in demand for local products. The Regionalfenster label as well as the PDO and PGI label are recommended to be better promoted by retailers selling products with these labels as well as the institutions in responsibility of these labels.

1. Introduction

The food industry is continuously evolving with different trends and consumer beliefs. One of the biggest movements in Germany in the past years is the ‘Fridays for Future’ movement with more than 1.4 million protesters on the 20th of September 2019 (ZDF, 2019). The reason for that and many other movements is global warming, as well as deforestation, the loss of biodiversity and famine. There are many ideas on how to solve or minimize these issues. These ideas include many aspects of consumers daily life, such as lifestyle and food consumption patterns.

The food industry has gone through many developments over the course of the past centuries. These include phases of mass production, industrialization, slow food movements and many more, leading to the development of different food trends. These trends vary from continent to continent and from country to country, even sometimes from region to region. Due to “global climate change the relevance of sustainable food consumption is growing” (Brons & Oosterveer, 2017) and therefore “regional and locally produced foods (…) are experiencing increasing success among consumers” (De Canio & Martinelli, 2021) in the European Union.

Another issue discussed in the food industry is the increasing centralization of food production due to competitive advantage in different areas of the world and the need to feed the whole population (Thu, 2009). Resulting from these shifts, the price of food decreased due to “the current economic conditions in the agricultural sector, dominated by global markets, farm specialization, scale increase and disconnection between rural communities and the farm business” (Guiomar, et al., 2018). Farms became bigger and fewer people are involved in the farming process. The knowledge of food production and the relation to its producers decreased (Weatherell, Tregear, & Allinson, 2003) and consumers increasingly lost touch with the food they were eating. However, there were also many movements that went against that evolution. More and more consumers are willing to spend more money on foods which are of high quality and higher transparency. To clearly indicate this, various labels are used on product packaging, for instance products with a geographical indication showing the origin of the product (Woolfe & Ditton, 2013). To indicate the willingness to pay for these labeled products, Aprile et al. (2012) found that consumers are willing to pay a higher price for a product with a Protected Designation of Origin (PDO) label, with their second choice being the organic farming label, and lastly the Protected Geographical Indication (PGI) label (Aprile, Caputo, & Nayga Jr, 2012). Fernández-Ferrín et al. (2019) stated that consumers dissatisfaction for industrial produced foods is growing (Fernández-Ferrín, et al., 2019). From this dissatisfaction seen by consumers, Carlo Perini founded the Slow Food Organization in 1986 in Italy, which set the first steps to the local food trend (Janzer, 2018). The trend of local and regional foods aims to support smaller farmers and processors and minimize globalization as well as to increase transparency.

In the EU, certifications like the PDO, PGI and the Traditional Specialty Guaranteed (TSG) labels are aiming to protect traditional foods within the continent. In Germany, there are labels such as the 'regional window' to inform consumers about the origin of their products. Some states in Germany even have their own regional label, but still, there is no real definition of a regional food product. This is why this research aims to find out what the opinion of German consumers on local food is. Furthermore, it aims to have a clearer definition of what consumers see as regional or local. In addition to that, it aims to find out what the opinion of Germany consumers on different labels of origin is. The research is relevant to German retailers and producers of local food as well as for the institutions regulating the different quality labels since information on the consumers opinion and demand is aimed to be found.

1.1 Local Food

A rapidly growing trend for consumers, especially in developed countries, is the purchasing of local food (Skallerud & Wien, 2019). According to the Cambridge University Press (2021), the term local means "from, existing in, serving, or responsible for a small area, especially of a country" whereas regional is defined as "relating to or coming from a particular part of a country" (Cambridge University Press, 2021). Both terms show that something is from a specific area or part of a country. Regional or local food are not clearly defined and its radius from where it can be sourced varies tremendously.

According to Jensen et al. (2019), the main perception of local food has benefits such as freshness, tastiness, safer food, better animal welfare and the reduction of the environmental impact which are some of the motivators for consumers to purchase local food products. Jensen et al. (2019) states that Danish consumers see local food as "nationally produced" or "produced nearby" (Jensen, et al., 2019) and Finish consumers associate their "self-identity" with local food (Kumar, Talwar, Murphy, Kaur, & Dhir, 2021).

Another reason for the growing local food trend is the fact that consumers are demanding more transparency in the supply chain and are interested in shortening the long travels of their food products (Feldmann & Hamm, 2015). Producer markets such as farm shops, farmers markets, online local food boxes and many other options are growing rapidly (Holloway, et al., 2007). More and more consumers are looking for farmers markets to get in touch with the producers and spent their money on food grown and produced in their region. Every country has their own view and culture regarding local food, and the pace and options for regional food are different between countries. According to Supermarkt-Inside (2018), German supermarkets are starting to offer more and more local produce to the consumers which improves the convenience of the purchasing of local products. Two of Germany's biggest retail chains, Edeka Group and Rewe Group (Koptyug, 2021), are offering regional product ranges to the consumers. Under names like 'Rewe Regional', consumers can purchase regional produce in the supermarket. The shares of the local food purchased by consumers increased from 2.5 % in 2010 to 10% in 2018 which shows the increase in consumer demand (Supermarkt-Inside, 2018).

1.2 Agriculture in Germany

Germany has a population of 83.1 million inhabitants (Destatis, 2021) and around 266,600 farms in 2019. In 1975, Germany had 904,700 farms which is almost three and a half times as much as there are today (Statista, 2019). According to the Bundesinformationszentrum Landwirtschaft (2021), farms with a facility size of smaller than 100 hectares decreased during the past ten years, whereas farms with a facility size of 100 to 1000 increased with up to 30% in the past ten years. In addition to that, statistics show that one farmer in 1960 fed 17 people whereas in 2018 one farmer feeds 134 people.

The agriculturally used land area in Germany has not changed much in the past ten years and averages around 16.7 million hectares (Bundesinformationszentrum Landwirtschaft, 2021 a). According to the federal information center for agriculture (2021), Germany was self-sufficient in 2018 with products like meat, milk, potatoes and sugar but not with products like vegetables, fruit, eggs, honey and grains. The total percentage of nutritional self-sufficiency in 2017/18 in Germany has been at 88% (Lenfers, 2020). According to the Food and Agriculture Organization of the United Nations (2015/16), Germany belongs to the countries which roughly produces the same quantity of food that it consumes, meets dietary needs, and exports some food (Food and Agriculture Organization of the United Nations, 2015). Even though Germany is the fourth biggest exporter of agricultural products worldwide in 2019, with a value of $65.1 billion (Knoema, 2021), there is a rising interest in locally produced products in Germany (Leopold, 2020).

1.3 Labels of origin in Germany

In section 1.3, different labels that indicate the origin of a product will be introduced.

1.3.1 PDO, PGI and TSG label

To ensure the regionality of products, there are different options for consumers to find a product's origin. One of the examples are registered labels which indicate the place of production and/or the origin of a food product. The European Union has many different origin labels which show the consumer where the product comes from. According to the European Commission (2021), PDO, PGI and TSG labels indicate that a traditional product is from a specific area and protect these products. The label shown on the left of figure 1 is the PDO label which stands for Protected Designation of Origin and defines an agricultural product, food, and wine with a strong link to its place of production. Products with the PDO label have to be produced, processed and prepared in a specific region. All raw materials have to be sourced from the specific area whereas for the PGI label, which stands for protected geographical indication, at least one of the three processes has to take place in the according region. For instance, PGI labeled wines have to contain at least 85 percent of grapes of their specific region where the wine is made. The TSG label on the right of the picture stands for traditional specialty guaranteed and highlights a traditional aspect of a product. A tradition could be the composition of a product or a specific production process. This label is not linked to a special region and products can be produced in different areas (European Commission, 2021 a).

Figure 1 German PDO, PGI and TSG Label *(Bundesministerium für Ernährung und Landwirtschaft, 2020 b)*

Germany has 174 registered PDO, PGI and TSG products listed. The registered products are divided into four categories: wine, food, spirit drinks and aromatized wine. The German food register includes meat, cheese, processed and unprocessed fruits, vegetables, cereals, fish, bakery products and specialty products (European Commision, 2021 b). In the picture found in the appendix, all German register PDO and PGI products can be seen. The animations are indicating the products category which are encircled with either a circle with a fine line or a circle with a big line. The circle with a big line is indicating a product from a state. The circle with a fine line is indicating a product from a specific district, landscape or region. Products with a black dot next to them are indicating the commune they are originating from. The official name of each product is written next to the animation.

1.3.2 Regional Quality Labels

Besides the European labels, Germany has 14 different labels from ten different states which indicate the regionality of the specific state of the products. A few quality labels from the different states of Germany can be seen in the picture below. These signs of origin have a total of 193 products listed. Listed products are divided into animal and plant-based products. Listed animal products are meats, eggs and honey and plant products are fruits and vegetables, grains, backed goods and drinks. Additionally, some of the labels ensure an organic product from a specific region. These signs can be found on a variety of food products from the different states in Germany. The signs are actively used in the German States Baden Wurttemberg, Saarland, Rhineland Wurttemberg, Bavaria, Hessen, Schleswig-Holstein, Thuringia and West Pomerania (Verbraucherzentrale, 2010). Unlike the European quality labels, the German regional quality labels usually only show the state of Germany where the product originates from, whereas for the PDO labeled foods, the name of the product indicates different regions or sometimes states in Germany. For example, three different PDO cheeses that have the region Allgäu indicated, or the PDO labeled meats which have the name of the city they are originating from in front of the products name which can be seen in picture found in the appendix.

Figure 2 German Quality Labels (Transparenzerhebung der regionalen Landesprogramme für Lebensmittel, 2010)

1.3.3 The Regionalfenster Sign

Another label that can help the consumer to increase their knowledge about the origin of the food they are buying is the Regionalfenster which can be seen in figure 3 below. It declares over 5000 foods, flowers and ornament plants in Germany. The label can indicate three things. First, it answers the question 'where does it come from?', second it shows 'where was it processed?' and last it answers the question of 'how high is the regional part of the product?'. In addition, the label indicates by which certification body the product gets checked on a yearly basis. Profeta and Hamm (2019) stated that "Concerning the indicated origin, the regulation of the Regionalfenster association only stipulates that the use of the label is reserved to local regions that are smaller than Germany. The producers have to decide by themselves which definition and limits they want to apply for the term local" (Profeta & Hamm, 2019).

According to the Federal Ministry of Food and Agriculture (2020), the region has to be explicit and verifiable as, for example, the federal state, the administrative district, or an indication of the radius in kilometers. The indication can also cross borders, for example, the region Eifel which crosses the borders to Belgium and Luxembourg. At least 51 percent of the ingredients and the first primary ingredient, in addition to the name-giving ingredient, have to be from the declared region. If a product is assembled with different ingredients, the percentage of the sum of all regional raw materials has to be declared. Furthermore, the place of processing has to be shown and additionally the origin of the agricultural inputs, such as feed, can be declared (Bundesministerium für Ernährung und Landwirtschaft, 2020 d).

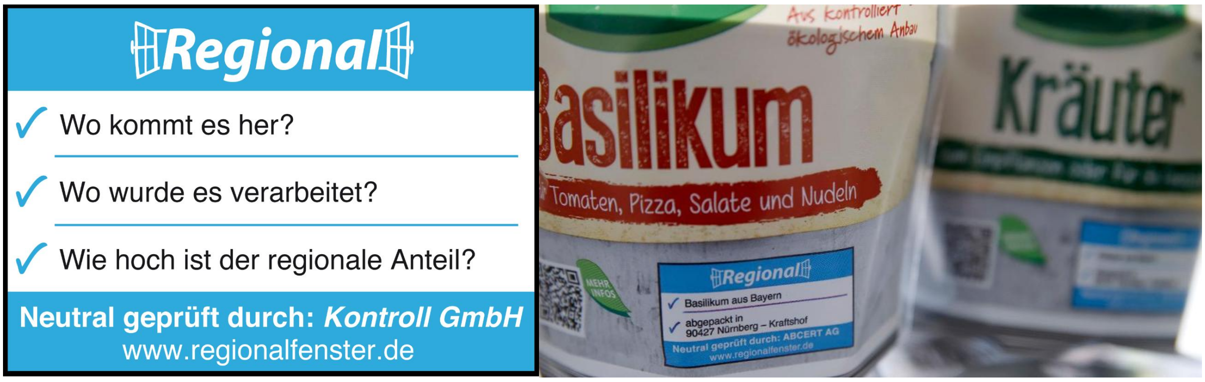

Figure 3 The 'Regionalfenster' Label (Bundesministerium für Ernährung und Landwirtschaft, 2020 e)

The label tries to make products more transparent for consumers and is the only label in which a postal code of the place of production and place of processing is indicated. The Regionalfenster label can be found on fruit, vegetables, herbs, meat, milk, eggs, processed products, fish, flowers, spelt and lentils in supermarkets across Germany (Reginonalfenster, 2021).

Even though there is a rise in demand of regional and local products in Germany, there is little data on consumers opinion of regional food labels while many different labels are available. These labels are mainly found on packaged products sold in the supermarket in Germany. Local food shopping options like farmers markets or small farm shops usually have less packaged and labeled products in general since small farmers are selling their produce directly to the consumers. In this way consumers can directly ask the producers where the products are originating from. Since the supermarket acts as a middle man between farmers and consumers, the purchaser cannot directly ask for the origin of the food. That is why the quality label help the consumers to increase their knowledge on the origin of a product and can give them further information, for vegetables and fruit for example which sometimes only have the country of origin declared.

Therefore, this research aims to find a deeper understanding of the term regional food and information on what consumers opinion on local food labels is. It aims to get knowledge of the consumers motivations and their familiarity with regional labels.

1.4 Main and Sub-Questions

The main question of this research is ‘To what extent do German consumers take labels into account which indicate the origin of a product when buying local foods?’. To answer this main question, five sub questions will help to find answers.

The research is divided into the following sub questions:

- What does local food mean to German consumers?
- Where do Germans buy local food?
- What motivates German consumers to buy local products?
- How do German consumers want to be informed about the origin of a product?
- What is their opinion on labels of origin on local food products?

2. Material and Methods

In this chapter, an overview of the research materials and methods will be given.

2.1 Research Design and Procedure

For the research, a survey was conducted among German consumers, which could be anyone who lives in Germany. This helps to answer the main- and sub questions, because "surveys can help gauge the representativeness of individual views and experiences" (SurveyMonkey, 2021). Since this research aimed at getting information from over 100 participants to get a reliable information on German consumers opinion on labelling on local food products, an online survey was the best way to reach as many participants as possible. The survey has been published online and send to the participants via social media platforms such as WhatsApp, Facebook, and Instagram, and consisted of questions which took the participants around five minutes to answer. The questionnaire has been posted in German and the target group of this questionnaire were Germans between 18 and 80 years old, since a broad answer to the research question was aimed to be found for the general population. The research is quantitative. The questions were being posted in a Google Forms document and most were being multiple choice question options. Only the last question has been an open question.

2.2 Survey Question

As it can be seen in appendix B, the 1st-4th question helped to collect general information about the participants. These questions helped to understand differences resulting from the area and state in which consumers are living, their education and their age. This was important to know because there are different labels in different states in Germany which can lead to different opinions of consumers. The education, age and living area of consumers helped to find out if answers were differing between these factors.

Question 5 and 6 helped to understand what local food means to German consumers, from which area consumers considered products to be local and which steps of the production must happen in the specific area. These questions are answering the first sub question.

Question 7 aimed to get more information on where German consumers buy local foods and is directly linked to the second sub question. This helped to get data on the percentages of consumers buying local foods in the supermarket where the local food labelling is mostly present.

The 8th questionnaire question answered the third sub question as it asked for the motivations of the consumers for purchasing local foods and gave indicators to why the quality labels might be helping the consumer when buying local products.

Question 9 is directly linked to the fourth sub question and aimed to find out how consumers would like to be informed on the origin of a product by choosing their most favorable options in the questionnaire.

Questions 10 to 16 aided to answer the fifth sub question which helped to understand the opinion of German consumers on labels of origin. The questions aimed to find out if consumers buy products with labels and if the labels helped the consumer to find local foods. All three different labels were assessed separately to find possible differences between the labels.

In table one below, the correlations between the chosen sub question and the questionnaire questions are shown.

Table 1 Sub Questions with Correlated Survey Questions

	Sub question	Survey Question
	General Information	1. In which state of Germany are you living? 2. Are you living in an urban or a rural area? 3. How old are you? 4. Which education degree do you have?
1	What does local food mean to German consumers?	5. What do you consider as local food? 6. Are you only considering a food product as local if all production steps (growing, processing, packaging, etc.) are taking place nearby?
2	Where do Germans buy local food?	Where do you buy local food products?
3	What motivates German consumers to buy local products?	7. Rank your motives for buying local products!
4	How do German consumers want to be informed about the origin of a product?	8. Choose how you would like to be informed about the products origin.
5.	What is their opinion on labels of origin on local food products?	9. Do you buy products with the PDO or PGI label? (picture of PDO/PGI label))

		10. Do you find the PDO/PGI label helpful when looking for local foods? 11. Do you buy products with the Regionalfenster label? (picture of Regionalfenster) 12. Do you find the Regionalfenster label helpful when looking for local food? 13. Do you buy products with the German quality labels? (picture of all 14 German quality labels) 14. Do you find the German quality labels helpful when looking for local food? 15. Comments and thoughts about local food labelling?

2.3 Data Analysis

The survey has been conducted and send to the participants in Google Forms which helped to collect the data and showed graphs, pie charts and bar charts of the responses. The survey collected categorical data, namely nominal and ordinal data. The analysis has been conducted by showing percentages of the responses. The data where participants could answer autonomously were being looked at separately and compared manually to categorize similar answers. To analyze the data, Google Forms, Excel, and SPSS were being used as well as statistical Chi-Square tests to highlight the correlation of dependent and independent variables. For the last four questions of the questionnaire, asking about the different labels, the Chi-Square test was being used to find statistical relevance regarding the demographics of the participants. Outcomes of these statistical tests were be presented in different graphs and tables.

3. Results

3.1 Demographic Overview Participants

This chapter shows the results of the survey which was distributed throughout German consumers. Answers were received from 248 respondents, from which 178 participants (72%) live in Lower Saxony, 15 participants (6%) in Schleswig Holstein and the third state with the most participants is Northrhine-Westphalia with 5 percent, presenting 13 participants. All other 13 states have only a few or no participants which can be seen in table two below.

Table 2 Overview of Respondents per State

State	Respondents	Percentage
Lower Saxony	178	72%
Schleswig Holstein	15	6%
Northrhine-Westphalia	13	5%
Brandenburg	8	3%
Bavaria	7	3%
Baden-Württemberg	6	2%
Hamburg	6	2%
Rhineland Palatinate	5	2%
Hesse	4	2%
Berlin	2	1%
Bremen	2	1%
Saxony	1	0.5%
Mecklenburg-Western Pomerania	1	0.5%
Saarland	0	0%
Saxony-Anhalt	0	0%
Thuringia	0	0%

When looking at the living area of the participants, 39 percent stated that they are living urban, whereas 30 percent are living in a rural area. The remaining 31 percent are living in areas between urban and rural.

Most participants were older than 50 years (34%), followed by 30 percent of participants between 18 and 24 years old. The age range of 25 until 34 years old has 21 percent and the age range of 35 until 50 years old has the lowest percentage with 15 percent and can be seen in table three below.

Table 3 Overview Age of Respondents

Age (in years)	Respondents	Percentage
18 - 24	74	30%
25 - 34	52	21%
35 - 50	37	15%
Over 50	85	34%

The distribution of the highest level of education of the participants can be seen in table four below. Almost half of the respondents have a mid-level education being the German Abitur, an apprenticeship certificate, or a bachelor study without diploma. 40 percent of the respondents have a high educational level, being a bachelor, master, or PhD degree.

Table 4 Overview Level of Education of the Participants

Education level	Respondents	Percentage
No education	2	1%
Low education	26	10%
Mid-level education	114	46%
High education	99	40%
Others	7	3%

3.2 What does local food mean to German consumers?

One part of the survey was aiming to find out how German consumers define local food. The results of the answers of the respondent can be seen in the figure below. The great majority of the respondents being 73 percent answered that local food must be from the region in which they are living.

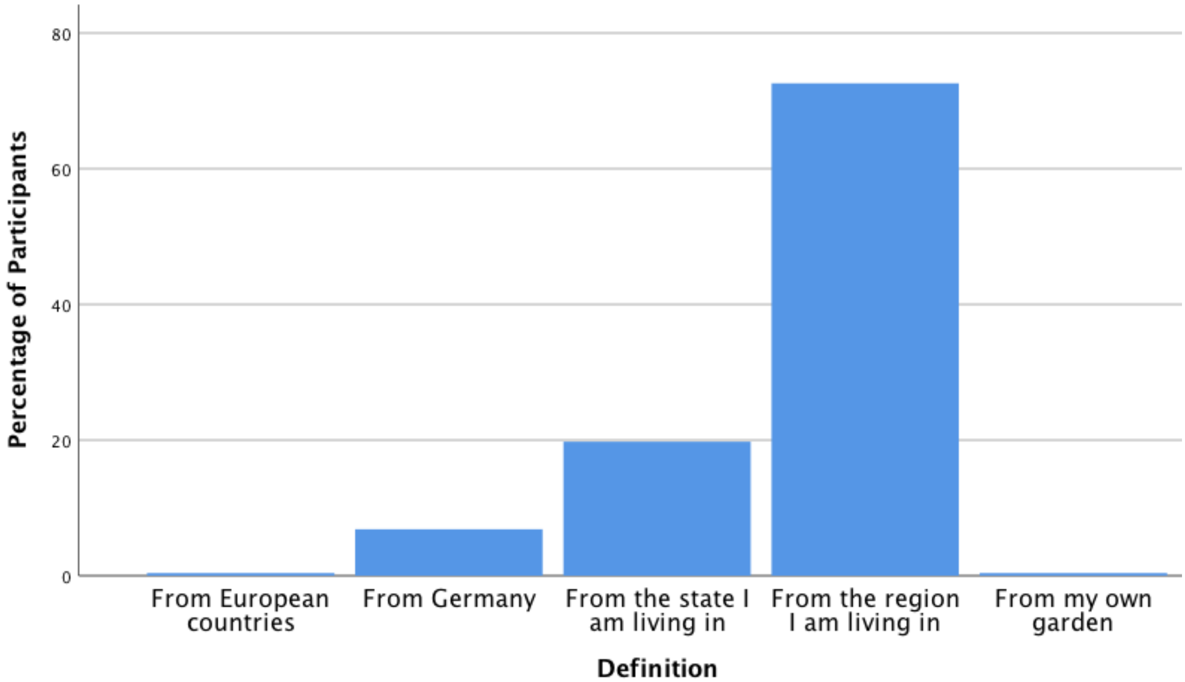

Figure 4 Definition of Local Food According to Participants of Survey

For finding significance in the results of the survey when looking at the demographics of the participants, a Chi-Square test was conducted. It can be seen in the table below.

Table 5 Chi-Square Test of Definition and Demographics

Aspect	Value	df	P Value
Age	19.868	12	0.070
Education	17.285	16	0.367
Living Area	15.135	8	0.057

When looking at the outcome of the Chi-Square test resulting from the definition of local food and the age range, education level and living area, the p values are not of a value below 0.05 and consequently not significant. However, the living area of the participants almost reaches the p value of significance with a value of 0.057.

It is found that participants from all living areas mostly consider products from their own region as local, followed by a lower but equally distributed percentage of products from their state. However, it can be seen that urban living participants have a much higher percentage of considering products from Germany as local than participants living in rural and semi-rural areas.

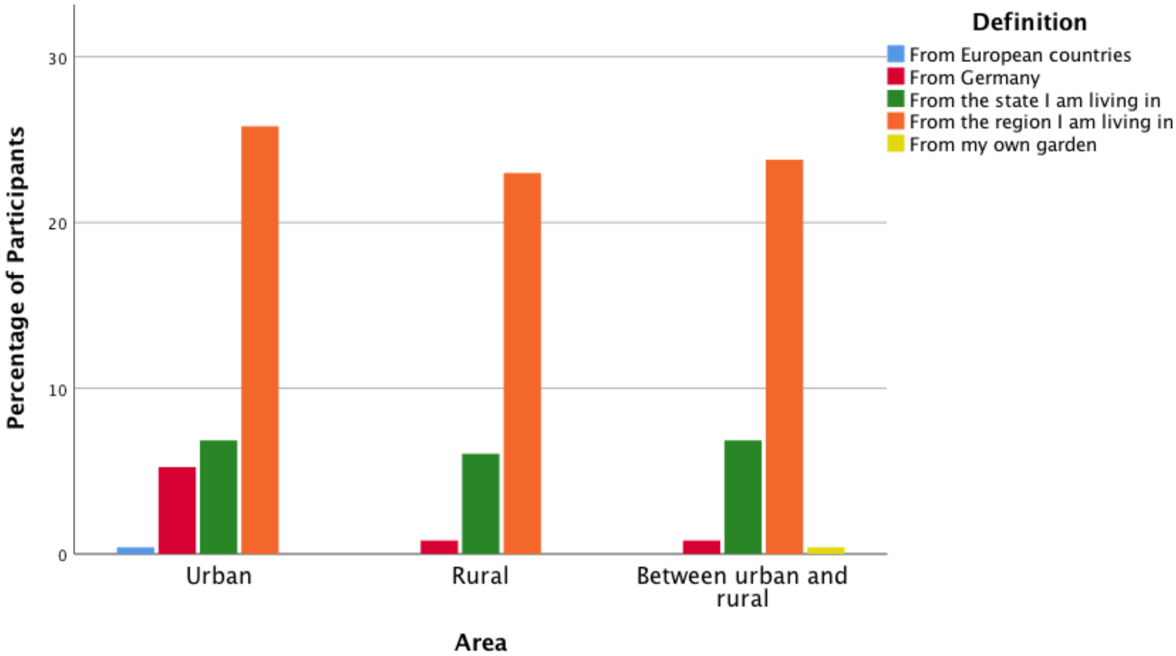

Figure 5 Definition of Local Food and Living Area

The age range of participants has a slightly higher p value with 0.070 but can also be looked at since the p value of 0.05 is not exceeded by much. Figure 6 shows the results of the survey question asking about the definition per age group. For all age groups, participants answered mostly that they consider food as regional when it comes from their region. However, this answer was given the most by the participants over 50 years old, while younger participants (18-24) considered food from the state more often as local than the other age groups.

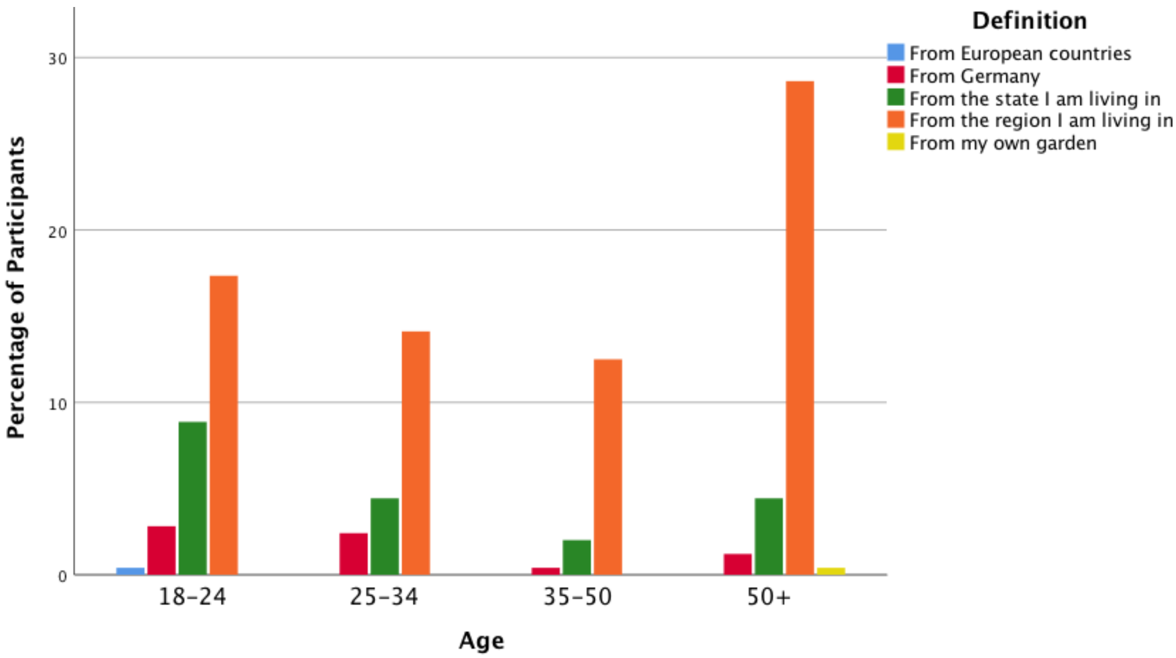

Figure 6 Definition of Local Food per Age Group

In addition to that, the survey asked if consumers are defining food as local if all production steps like harvest, processing and packaging were being done close by the consumer. 80

percent of the respondents stated that all production steps have to take place close by for them to consider a product local. 15 percent of the respondents however said that the production of food close by is enough for them to consider it as local. Three participants (1%) stated that they consider foods to be local if one of the different production steps was being done close by. The remaining four percent of participants did not find any of the three options fitting.

3.1 Where do Germans buy local food?

Another question that the respondents answered in the survey was about where they buy local food mostly which can be seen in the figure below. Here, participants could only fill out one option since it was asked where they normally and most often buy local products. The majority with 49 percent of the respondents buys local food in the supermarket, followed by almost 18 percent buying their local food in farm shops and 16 percent in organic shops and almost 16 percent on farmers markets.

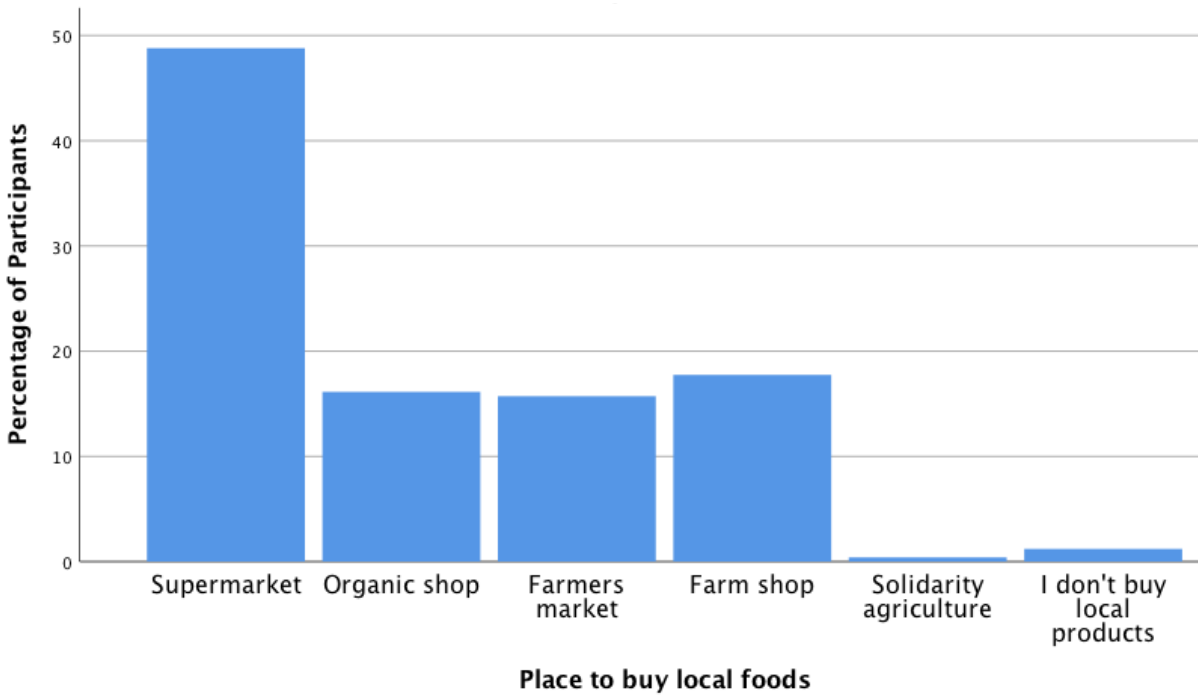

Figure 7 Places to Buy Local Food

The results of the Chi-Square test looking at the places where participants purchase local food and their living area have shown a p value of 0.002 which is below a value of 0.05 and therefore significant (Appendix E). The figure below shows that urban living participants are mainly buying local foods in the supermarket. Farm shops are mainly used by rural participants and participants that live between rural and urban areas. Farmers markets are used by all participants, however, have a slightly higher percentage with urban living participants.

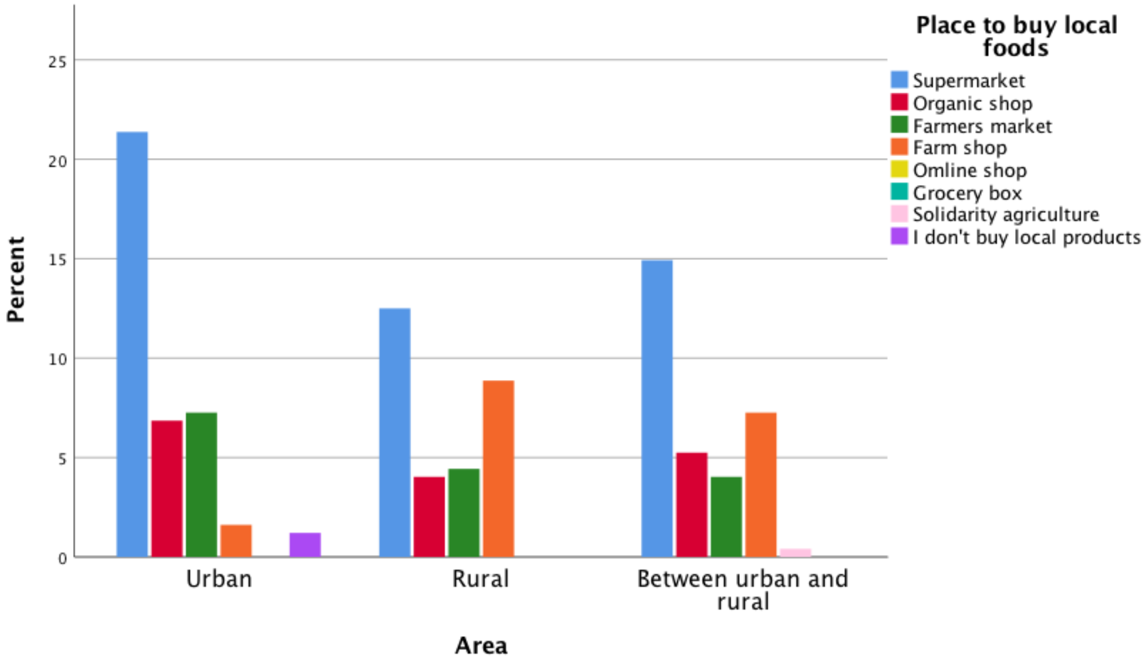

Figure 8 Places to Buy Local Food per Living Area

For the correlation of the places to purchase local foods and the age range of participants, another Chi-Square test was conducted showing a p value of 0.079 (Appendix E) which is slightly above the significance value of 0.05 but still relevant for this research. It can be seen that participants over 50 have a higher frequency of purchasing local foods through organic shops, farm shops and farmers markets than younger participants. Participants in the age range of 18 to 24 have the highest percentage of purchasing products at the supermarket which shows that older participants have a much higher frequency of shopping at alternatives to the supermarket than younger participants.

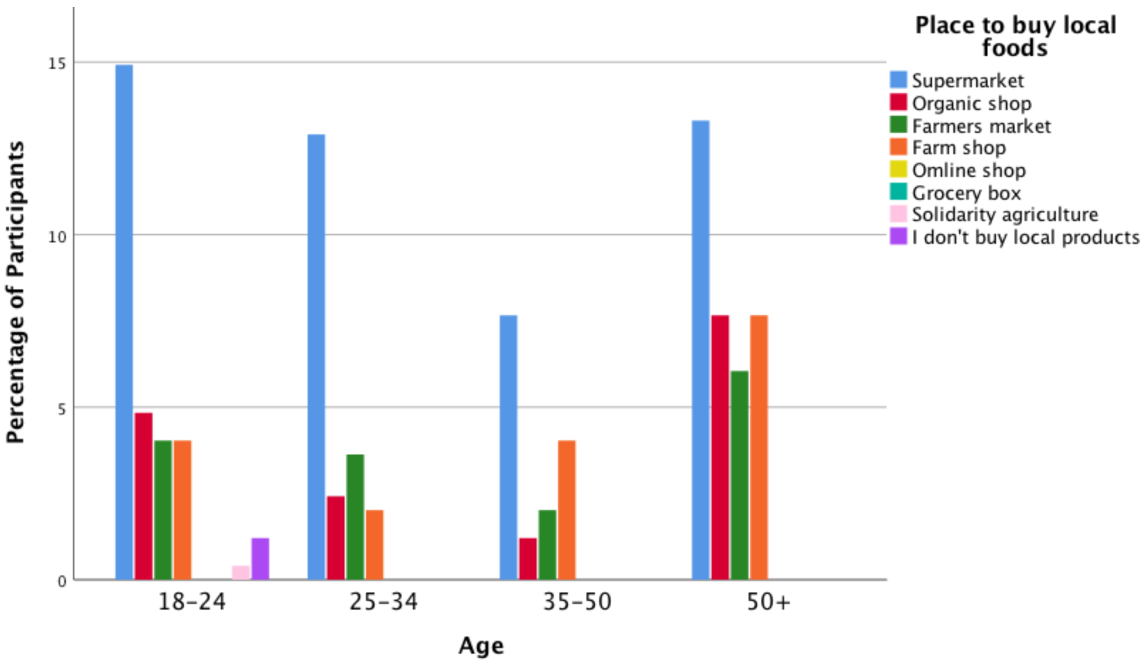

Figure 9 Places to Buy Local Foods and Age Range

3.2 What motivates German consumers to buy local products?

To answer the question of what motivates German consumers to buy local products, the participants were asked to rank six different motivators. Since the question was confusing to most participants, the results will only look at the biggest motivator of the participants. The majority with 52 percent chose the motivator of fresher, healthier, and more seasonal products, followed by 19 percent choosing the motivator of the environmental impact due to shorter transportation. The third most chosen motivator with 17 percent is the better quality of the products which can be seen in the figure below.

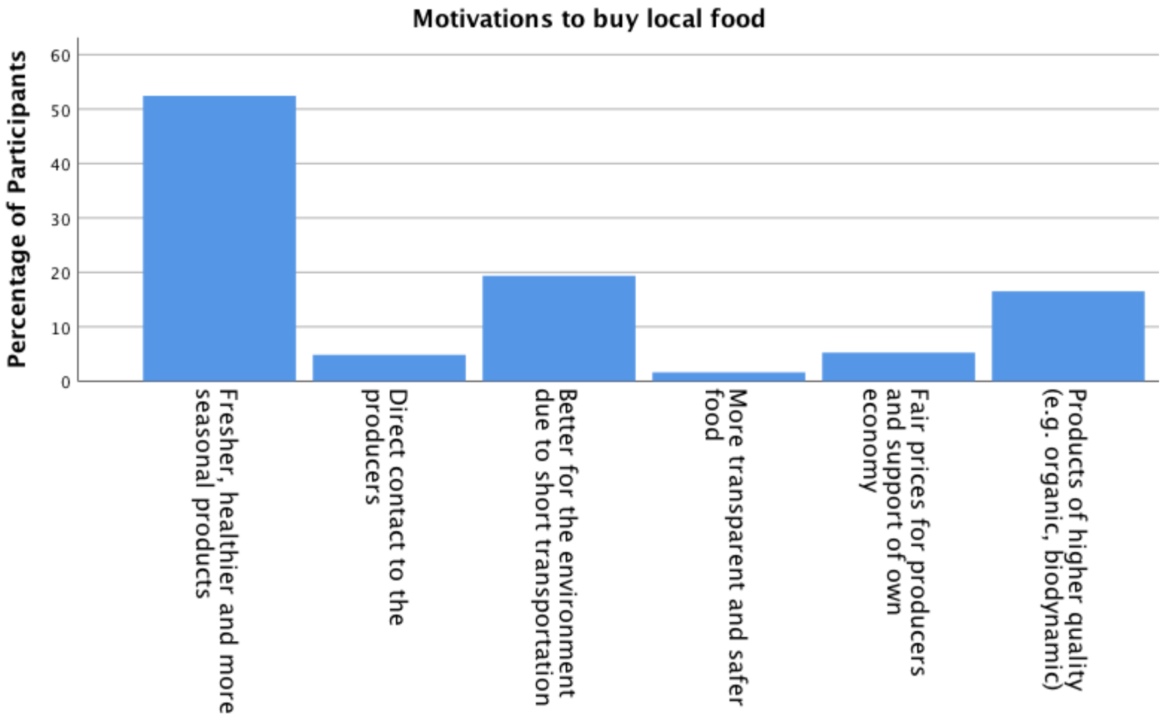

Figure 10 Motivators to Buy Local Food

3.3 How do German consumer want to be informed about the origin of a product?

To answer the question how German consumers, want to be informed about the origin of a product, the survey has found that 75 percent of the participants would like to be informed on the packaging of a product, followed by 20 percent wanting to be informed through information signs in the supermarket. A small percentage of 5 percent would like to be informed through direct contact with a competent specialist.

3.4 What is their opinion on labels of origin on local food products?

Furthermore, the survey asked participants whether they purchase products with the different labels by showing them a picture of the three different label groups. The figure below shows the overview of the outcomes. It can be seen that the German quality signs are being purchased by the majority of participants with almost 90 percent. For the PDO and PGI as well as the Regionalfenster, the majority of participants was not familiar with these two labels.

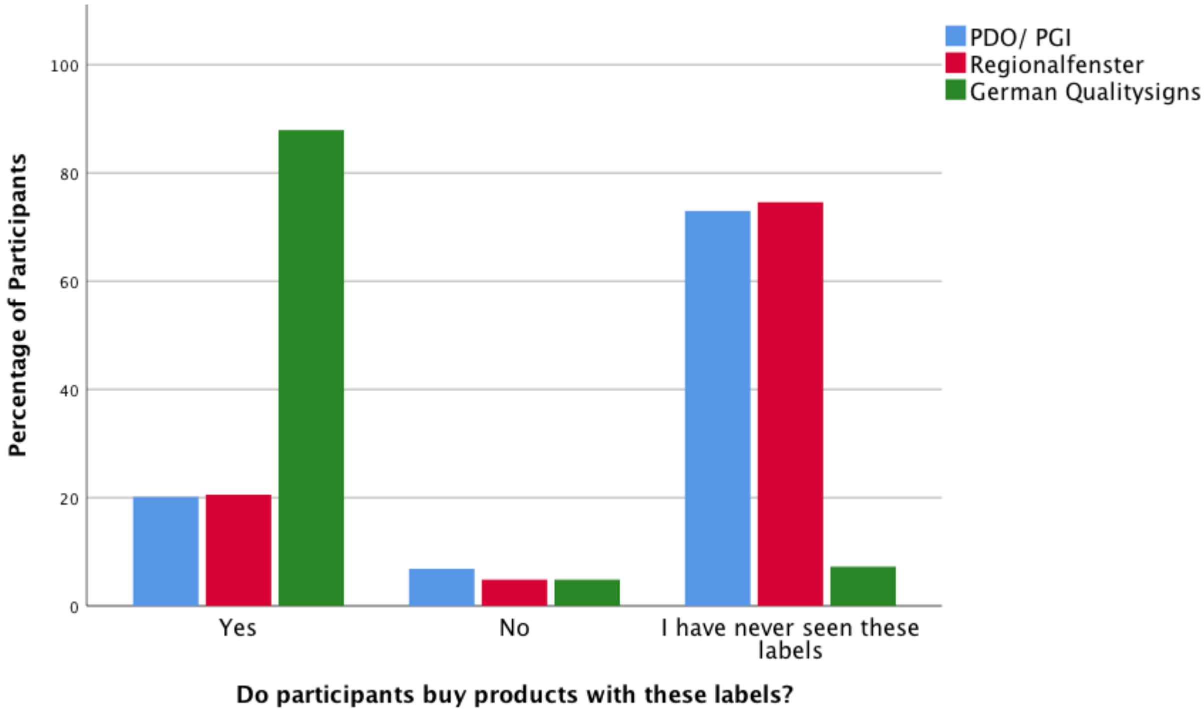

Figure 11 Overview of Participants Buying Different Labels

When asking the participants about the helpfulness of the different labels, the German quality signs got the most answers for being helpful, followed by the Regionalfenster label and lastly by the PDO and PGI labels. The highest percentage for not being helpful was found to be for the PDO and PGI labels which can be seen in the figure below.

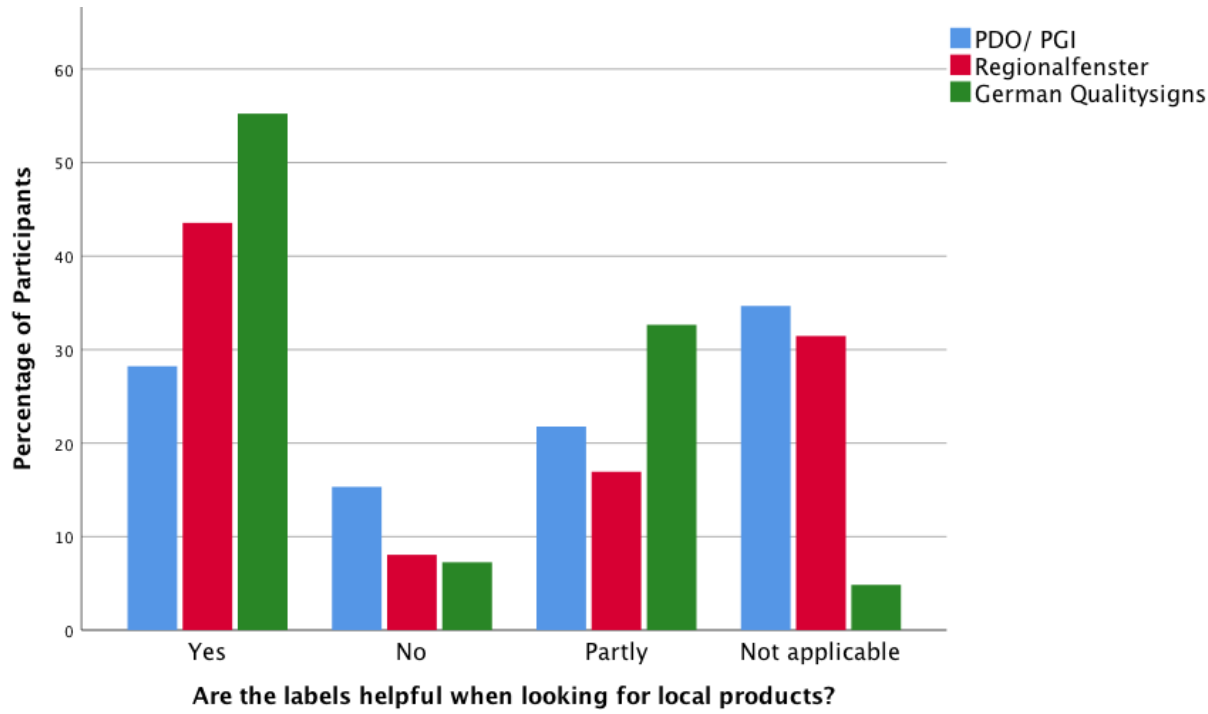

Figure 12 Overview of Helpfulness of Different Labels

A Chi square test was done to evaluate whether there are significant differences in responses based on living area. Table 6 shows the Chi-Square values and p values obtained. Significant differences ($p<0.05$) were found regarding helpfulness of PDO and PGI products and the helpfulness of the Regionalfenster.

Table 6 Chi-Square Tests for Correlation with Living Area

Aspect	**Value**	**df**	**P Value**
Purchase PDO/PGI	3.803	4	0.433
Helpfulness PDO/PGI	19.448	6	0.003
Purchase Regionalfenster	6.170	4	0.187
Helpfulness Regionalfenster	17.572	6	0.007
Purchase German Signs	0.480	4	0.975
Helpfulness German Signs	6.764	6	0.343

Figure 13 shows the responses obtained for living area and helpfulness of PDO and PGI labels. Participants living in a rural area find these labels more useful than people living in urban or urban/rural areas. This shows that participants living in rural areas might be more familiar with the PDO and PGI labels and find them helpful when purchasing local food. It could also be that participants living in rural areas find the European quality labels more helpful because of visual reasons since a picture of the labels was shown in the questionnaire.

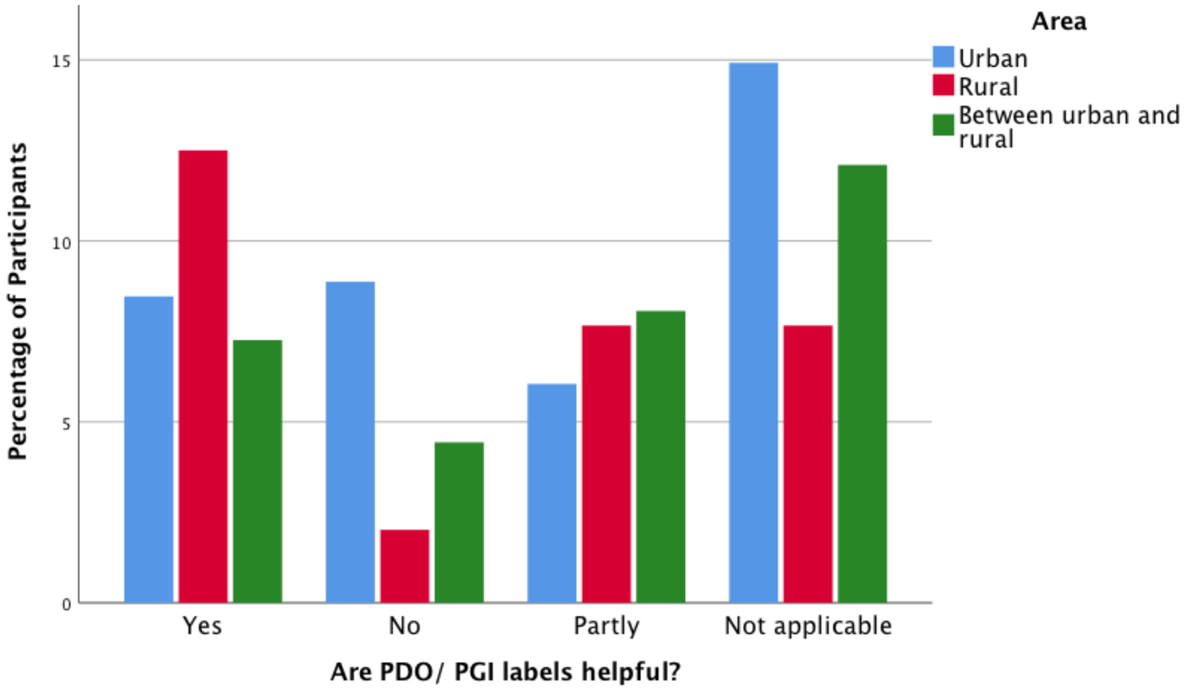

Figure 13 Overview of Living Area and the Helpfulness of PDO/PGI labels

When looking at the helpfulness of the Regionalfenster label, mostly participants living in urban areas find the label helpful when purchasing local foods. This can be seen in the figure below and is the opposite compared to the PDO/ PGI labels above. However, considering the Regionalfenster, the highest percentage for not finding the label helpful was also found with urban living participants. The highest percentage for finding the Regionalfenster partly helpful was chosen by participants living in semi-urban areas. All in all, when looking at the helpfulness of the Regionalfenster, that results differ but generally speaking, the more urban the participants are living, the more helpful they consider the label.

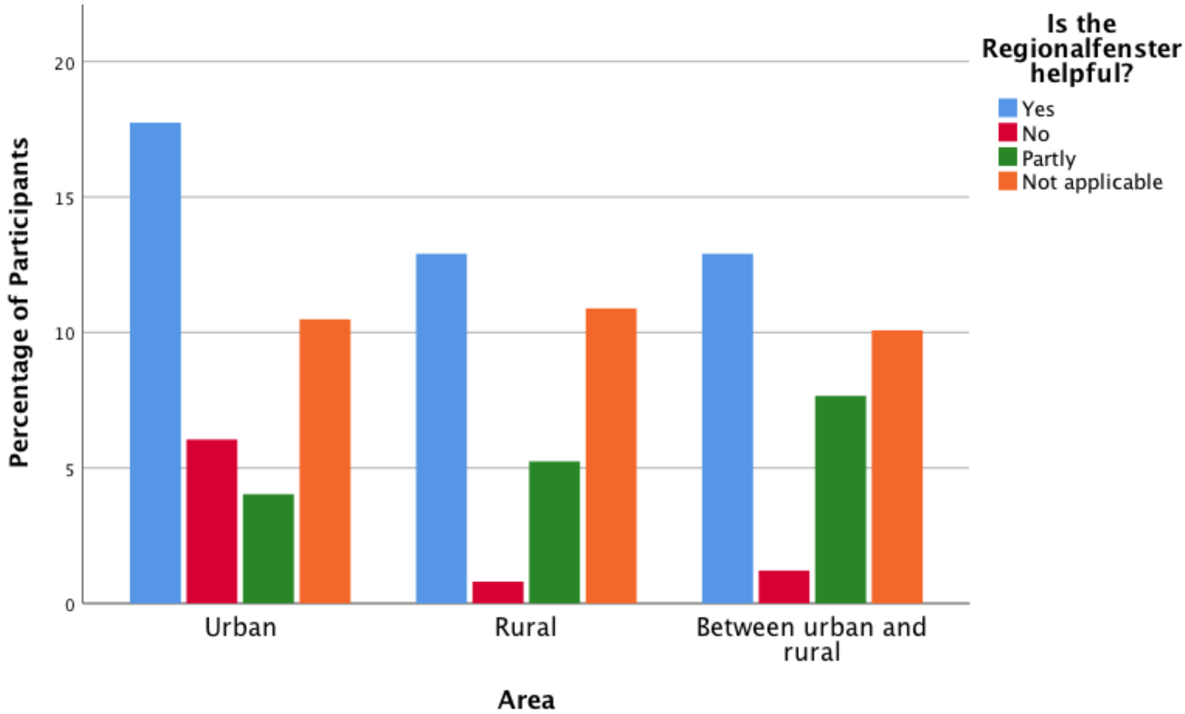

Figure 14 Overview of Living Area and the Helpfulness of the Regionalfenster

Another Chi-Square test was being done for the same six questions in correlation with the age group of participants. The results can be seen in the table below which shows the highest significance for the helpfulness of PDO/ PGO labels with a p value below 0.05 being 0.005. Not as significant with a p value of 0.062 but almost at the significance level below 0.05, is the purchasing of the Regionalfenster in correlation to the age range of participants.

Table 7 Chi-Square Test for Correlation with Age

Aspect	**Value**	**df**	**P Value**
Purchase PDO/PGI	8.527	6	0.202
Helpfulness PDO/PGI	23.341	9	0.005
Purchase Regionalfenster	12.011	6	0.062
Helpfulness Regionalfenster	14.588	9	0.103
Purchase German Signs	5.669	6	0.461
Helpfulness German Signs	12.799	9	0.172

Table 7 shows that the age of the participants has the most significant difference with the helpfulness of PDO and PGI labels. Figure 15 below shows the differences of age in correlation with the helpfulness of PDO and PGI products. It shows that more participants of the age over 50 and between the age of 18-24 find the PDO and PGI labels helpful. It also shows that mostly participants between the age of 25 to 34 do not find the labels helpful when looking for local food.

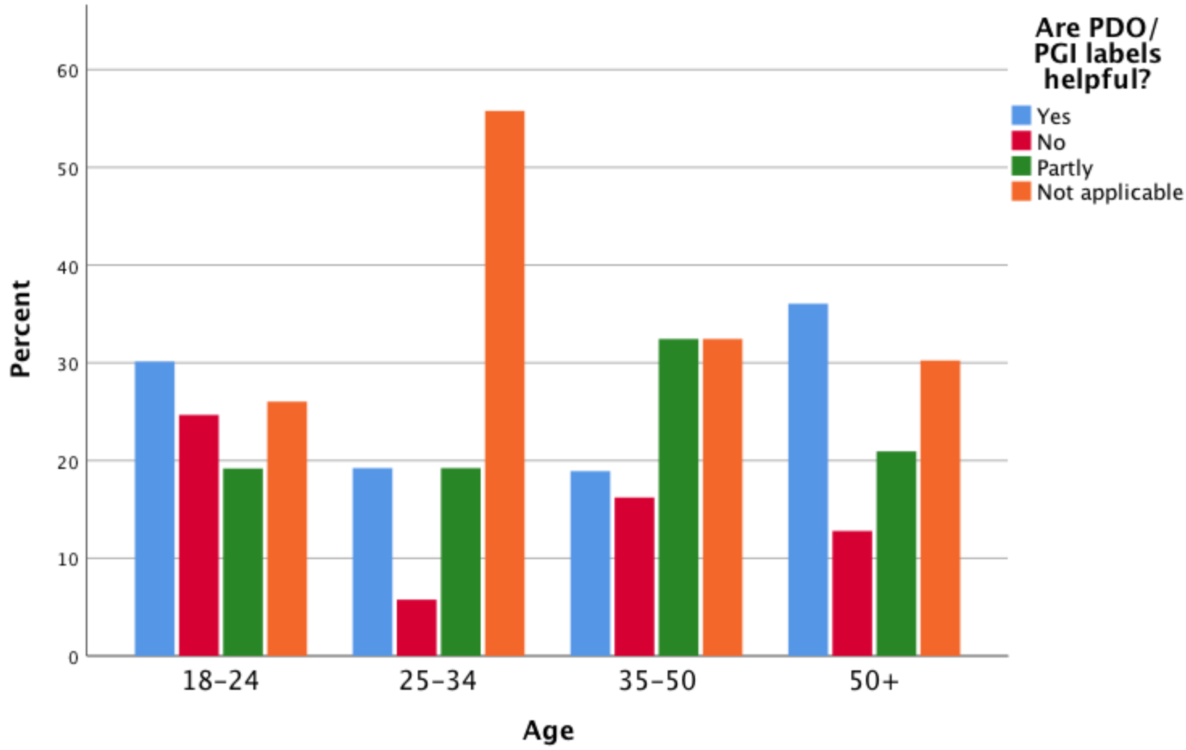

Figure 15 Overview of Age and Helpfulness of PDO and PGI Product

When looking at the purchasing of products with the Regionalfenster and the different age groups, it can be seen that participants over 50 are mainly not familiar with the label followed by the younger age range of 18 to 24-year-olds. This is shown in the figure below. In addition to that, it can be seen that the age range of over 50 has no participants answering that they do not buy products with the Regionalfenster whereas the highest percentage can be found at the age group of 18 to 24-year-olds.

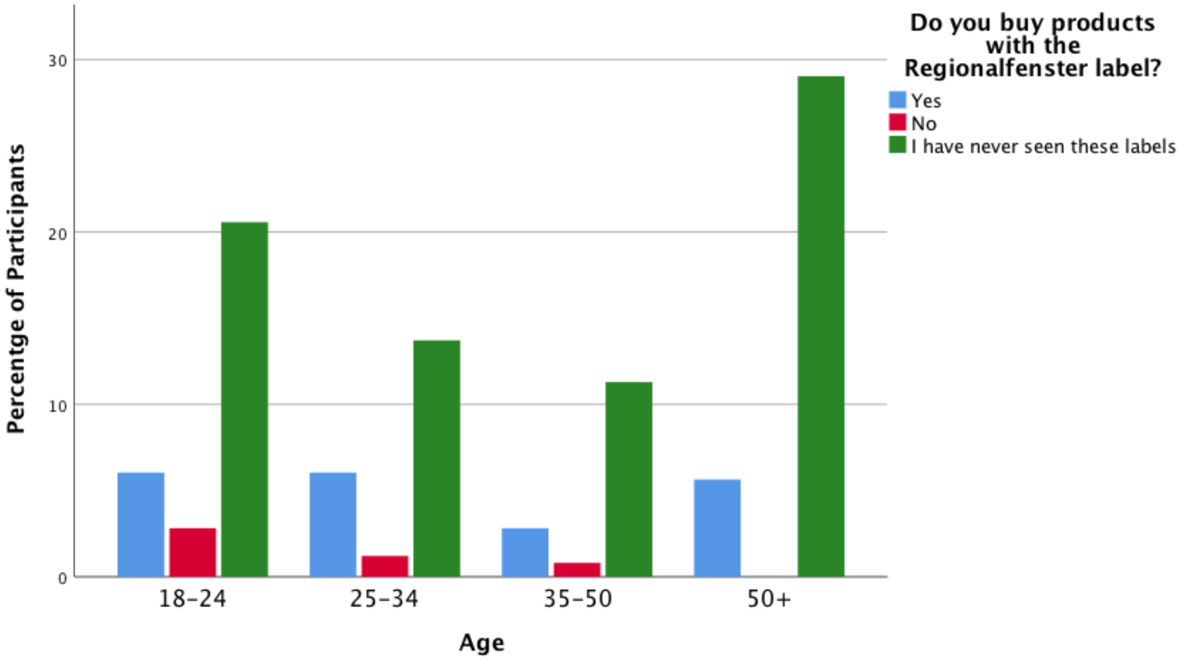

Figure 16 Overview of Age and Purchasing of Regionalfenster

Furthermore, a Chi-Square test was being conducted on the six questions regarding the opinion of participants towards labels of origin and their educational level which can be seen in the table below.

Table 8 Chi-Square Test for Correlation with Education

Aspect	Value	df	P Value
Purchase PDO/PGI	6.894	8	0.548
Helpfulness PDO/PGI	15.019	12	0.240
Purchase Regionalfenster	8.134	8	0.421
Helpfulness Regionalfenster	24.404	12	0.018
Purchase German Signs	5.180	8	0.738
Helpfulness German Signs	14.101	12	0.294

Table 8 shows that there is a significant difference between education level and the helpfulness of the Regionalfenster label and figure 16 below shows how participants think about the helpfulness of the Regionalfenster label. For this graph, participants with no education and other educations were being excluded due to the low percentages of these categories. Participants with a low education mainly stated that they find the Regionalfenster helpful or that it is not applicable. Whereas participants with a mid-level and high education have a similar answering pattern being the highest at finding the label helpful and the lowest with finding the Regionalfenster not helpful.

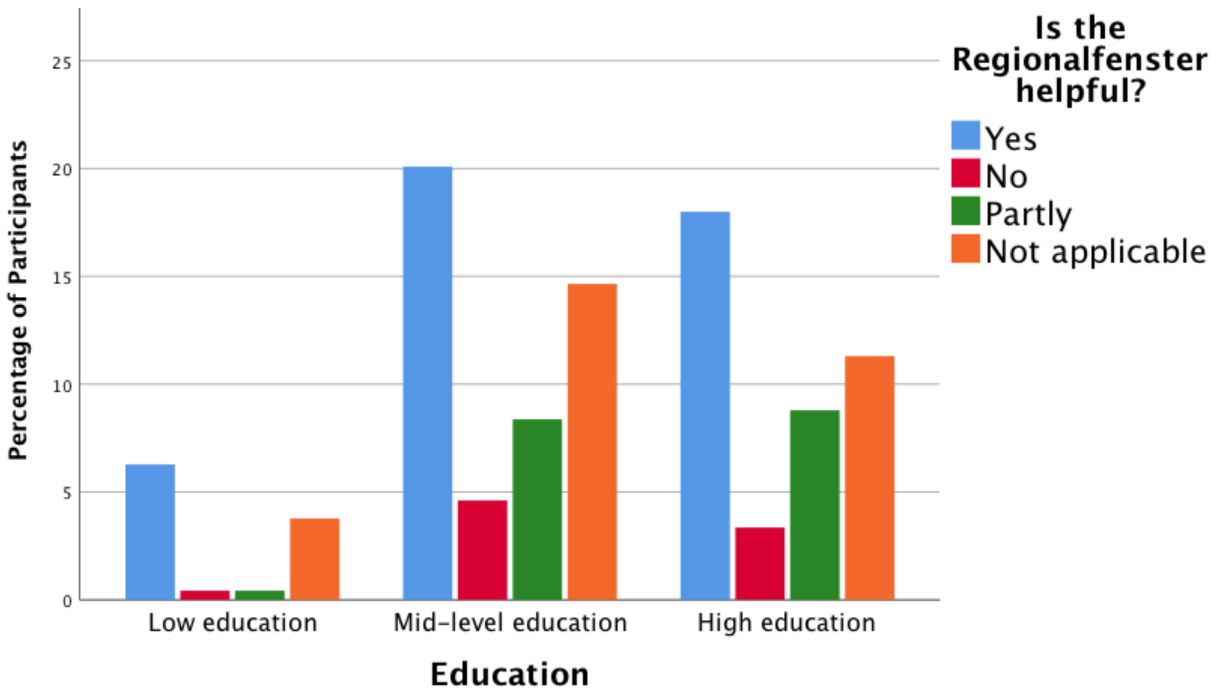

Figure 17 Overview of Education and the Helpfulness of the Regionalfenster

In addition to the 16 multiple choice questions of the questionnaire, participants were able to leave comments and thoughts about the German signs of origin. Mostly participants were asking for a more standardized sign for local food in Germany or even Europe. The second most written comment was that the signs are not easy to find on a product and too small in general, followed by two participants stating that the signs are not comprehensible enough for consumers to understand what they are about and two participants commenting that they are mostly looking for signs like the organic or Demeter sign rather than signs of origin.

4. Discussion of Results

This thesis was written to get a deeper understanding of the opinion of German consumers on labels that indicate the origin of local food products. The following chapter aims at finding answers on how German consumers define local food, where they mostly buy their food, what motivates them to do so, how they would like to be informed about the origin of a product and what their opinion on labels of origin is.

4.1 Definition of Local Food

The results of the survey show that the majority of participants (73%) define local food as originating from their own region. In Germany the term for local food is mostly used as regional food (Global2000, 2021), which could have led the participants to choose the answer of the origin of the region. However, also 19 percent of the participants define local food as originating from the state in which they are living and 7 percent defining as originating from Germany. As Netz (2016) states, regionality is a none defined term in Germany, in contrast to organic food for example. Netz claims that each retailer and brand have their own definition of the term regional or local food. The only requirement is that the products have to have an origin in or closely around Germany (Netz, 2016). Through the survey, it can be seen, that the majority wishes their products to come from the region they are living in and sometimes from the same state.

In addition to that, the survey found that the great majority of participants (80%), define products as regional, if all production steps took place close by. 15 percent stated that it is sufficient for them if the production of a product took place close by, but the raw materials are not from the region. This also shows that the participants are strict about the origin of regional food products. The PDO label meets the criteria of all steps being done in the same restricted area, whereas for the PGI label only one step has to be done in the specific area (European Commission, 2021). In addition to that, the Regionalfenster sign answers the question where the product comes from, where it was produced and how high the percentage of regional raw materials is (Regionalfenster, 2021). In this way German consumers could choose products with their demanded aspects if the availability is met in the supermarkets. The 14 German quality signs differ from each other regarding regulations on regionality of the different production steps (Verbraucherzentrale, 2010), consumers would have to check each label for the specific regulations of the labels which makes it difficult to comprehend and only 10 out of the 16 German states have a German quality sign registered.

4.2 Place of Purchase

Furthermore, the survey shows that exactly half of the participants purchase their local foods in the supermarket and that the other half is divided between farm shops, the organic shops, and the farmers markets. Participants living in an urban area have the highest percentage of respondents purchasing local foods in the supermarket and participants living in rural areas have a much higher frequency of purchasing local food in farm shops than urban living Germans. The significance of this correlation can be seen in chapter 3.1 where the Chi-Square test was conducted with the results of a p value of 0.002. This could result from the fact that there are not many farms in cities and therefore no farm shops. Rural areas or areas which are in between urban and rural areas might have a higher frequency of farm shops since the shops can be connected to the farm directly. It is also to say, that rural living participants shop the least in supermarkets. These outcomes are understandable and have met the predictions that urban-living consumers mostly shop in the supermarket and rural-living consumers less. Since most of the quality signs, which were later introduced in the survey, are mostly used in supermarkets and organic shops in Germany, it is important that the vast majority of participants purchase local foods in these shops which is found to be true with 66 percent of participants buying products in these two retail shops.

4.3 Motivations to Purchase Local Foods

When looking at the motivations for buying local foods, more than half of the participants (52 %) have answered that their most important motivation is the freshness, healthiness, and seasonality of the products. The second most present motivation (19%) is the improvement of the environmental impact due to the shorter transportation of the products. The third most chosen motivation with 17 percent is the better quality of the local products. This shows that most participants are concerned about the freshness, healthiness and seasonality of foods and put a high emphasis on these attributes. According to Meyerding et al., “the majority of studies have mentioned higher quality and/ or quality attributes, such as freshness, healthiness, and taste, as key purchasing determinates” (Meyerding, Trajer, & Lehberger, 2019 a) which accords with the findings of the survey and shows that these findings are of great importance for consumers.

4.4. Information on Local Foods

When asking participants about how they would like to be informed about the origin of a product, the majority with 75 percent stated that they would like to have a sign on the packaging of the product, followed by 20 percent of the participants stating that they would like to have an information board in the supermarket. Only 5 percent of respondents wants to have direct contact to a competent employee to get information on the origin of a product. This is applying to the concept of the quality labels which are all placed on the packaging of the products. "Local food origin and labeling play a key role in food purchasing among German consumers" (Meyerding, Trajer, & Lehberger, 2019 b) which shows that labels are the most demanded and impactful way to inform consumers about the origin of food products.

4.5 Consumers Opinion of Quality labels local food

The results of the questions about the quality signs differ from each other. Participants got asked if they buy products with three different labels, on the PDO and PGI label, the Regionalfenster label and the quality signs of the different states of Germany. The outcome showed that participants were not familiar with the PDO/PGI label and the Regionalfenster but the great majority of participants (88%) did buy products with the German quality signs. This shows that the participants were best informed and knowledgeable with the German signs and were only aware of purchasing products with these signs. The German quality signs consequently have the biggest impact on the participants when buying local products and might be useful for the target group of German retailers and producers of local foods. Significant correlations according to the Chi-Square test, conducted in chapter 3.4, have shown that there is a slight significance ($p<0.05$) of a p value of 0.062 between the age range of the participants and the purchasing of the Regionalfenster. Participants older than 50 years were significantly less familiar than participants between the ages of 25 to 50. It can be seen that participants over 50 are not familiar with the Regionalfenster and are consciously purchasing less products with these labels. This could be relevant to retailers and the institution of the Regionalfenster, since they could invest in informing these age group more specifically to increase sales.

When asking the participants if they find the labels to be helpful at purchasing local foods, the majority of participants (55%) states that they do find the German quality signs helpful, followed by the Regionalfenster having 44 percent of the participants finding it helpful and 28 percent finding the PDO and PGI label helpful. The German quality signs are the most helpful for German consumers when looking for local foods. This might be the case since the majority of participants stated that they already buy products with the German quality label. Which might lead to participants being more informed about these labels. Producers of local foods could invest in meeting the requirements for the German quality signs and the Regionalfenster since consumers find these most helpful and might purchase products with these labels.

4.6 Research and Methodology Reflection

As a reflection of the research, there is to say that the great majority with 72 percent of the participants lived in the state of Lower Saxony since the survey was distributed through WhatsApp contacts as well as Instagram pages of that state. As a consequence, the results are most representative for the state of Lower Saxony. Since the state of Lower Saxony is the second biggest in Germany and is close to the average income of the German population (Knupp, 2021), it is a good representation for the whole country. Nevertheless, to get a better overview of the whole German population, the research could be sent through other channels to a more diverse audience.

Reaching the amount of 248 participants was easy to obtain through social media since the time required for the questionnaire was short due to the easily comprehensible questions. The only feedback given by the participants was about the ranking of the motivators since this was hard to be composed with Google Forms. Due to the feedback on the survey, an explanation was added to the question for making it better understandable to participants. Because of these difficulties, only the results of the biggest motivator of the participants were looked at to not get wrong information on this data set.
In addition to that, the research only asked participants about three different kinds of labels of origin on the German market and limits its outcomes to these examples. Nevertheless, the research has found great differences between these labels.

5. Conclusions and Recommendations

5.1 Conclusion

This research aimed at providing a better understanding on the opinion of German consumers towards local food and its labelling. The outcomes of the research are useful for local food producers and retailers in Germany, such as supermarkets and other retail markets that are using quality signs to inform consumers about the origin of food. Particularly information on the definition of local foods, the place of purchase, the motivators, the information channels, and the opinion toward quality signs has been collected throughout this research. An online survey was carried out to collect quantitative data from 248 German consumers.

Most of the German consumers define local foods as coming from the region in which they are living. Findings have shown that consumers which are living in urban areas and younger consumers have a wider definition being closer to the state in which they are living. Furthermore, German consumers prefer all production steps of a product to take place close by.

Almost half (49%) of consumers are buying local foods in the supermarket, the other half of consumers are almost equally distributed between farm shops (18%), organic shops (16%) and farmers markets (16%). Statistical tests have shown that consumers living in urban areas and consumers between the age of 18 and 24 most often buy local foods in the supermarket. Consumers above 50 are buying local foods more often in organic and farm shops then younger consumers.

The main motivator for German consumers with 52 percent is the freshness, healthiness, and seasonality of local foods. This is followed by almost a quarter of participants valuing the reduction of the environmental impact of local foods as their main motivator. The great majority (75%) of German consumers would like to be informed on the origin of a product by signs on the packaging.

When concluding the opinion of German consumers on local food labelling, it is to say that German consumers are mainly purchasing local products with the German quality sign and are perceiving these signs to be the most helpful. However, even though the majority of German consumers (75%) was not familiar with the Regionalfenster sign, it is to conclude that especially consumers living in urban areas find the Regionalfenster sign helpful when looking for local products. The PDO and PGI labels were found to be the least helpful from the three different label categories with only 30 percent of participants perceiving them as helpful. However, it was found, that consumers living in rural areas and consumers over 50 perceive these labels significantly more helpful than consumers living in urban areas and younger consumers.

All in all, German consumers are mainly buying local foods with the German quality signs in the supermarket and would like their local products to come from the region in which they are living while all production steps being executed close by. Considering these circumstances, German consumers do have very high expectations on their local food products and are buying these products as they perceive them as fresher, healthier, and more seasonal. It is also to conclude, that German consumers are not well informed about the different labels, since the label of the Regionalfenster and the PDO label are fitting the requirements, of products being produced in a specific region with all production steps being undertaken in these area spans, far more. Whereas the German quality signs, which are mainly bought by consumers have much wider and undefined requirements.

5.2 Recommendations

5.2.1 Short Term Recommendations

Producers of local products should focus on selling their products within the region they are produced. Retailers are recommended to take more products from the region they are selling in, into the product offer to supply the consumers with more regional foods. In urban areas where producers might be further away, the distance can be wider. Local products which are targeted to younger consumers can exceed the region as well since these consumers have a more state focused understanding on local foods. In addition to that, producers of local food are recommended to undertake possibly all production steps close by. Local foods are recommended to meet criteria of being fresh, healthy, seasonal, and environmentally friendly to be most interesting to consumers. Labels should be used directly on the packaging of the products. The German quality labels can have an impact on German consumers since the labels are being found helpful. The Regionalfenster label is recommended to be targeted on products sold to urban living consumers whereas the PDO and PGI label are being found more helpful by rural living consumers.

In addition to that, there is a huge potential for the German quality signs since consumer are more familiar with the labels and perceive them as helpful when looking for local foods. Local food producers from states with these labels are recommended to invest in a certification of the German quality labels.

5.2.2 Long Term Recommendations

As a long-term recommendation, it is to say that German consumers should be better informed on labels of origin and quality labels used in German supermarkets. In this way consumers could have a better understanding of local products and might increasingly look for these labels. Especially the Regionalfenster and the PDO and PGI labels should offer information to German consumers since they are not known by the great majority. Nevertheless, even if consumers do not buy local products with these labels consciously, a bigger part of consumers would find them helpful or partly helpful when looking for local foods. This shows the long-term potential of the quality signs. If consumers would be better informed and the demand for local products would rise, more producers would invest in applying for the label certificates and might adapt production accordingly.

Further research can be done on which product categories are mainly bought locally by consumers since producers could limit the labeled product offer accordingly. It would be also of importance to get further research on the question if a local food label would increase the consumers’ willingness to pay for these products. This would be of interest for producers since the price of the labeled products could then be increased. All in all, local food labels are not well known by consumers but appear to be found helpful and should be better promoted in supermarkets and organic shops or various other channels.

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Appendices

Appendix A – Figure of Germany and its PDO and PGI products

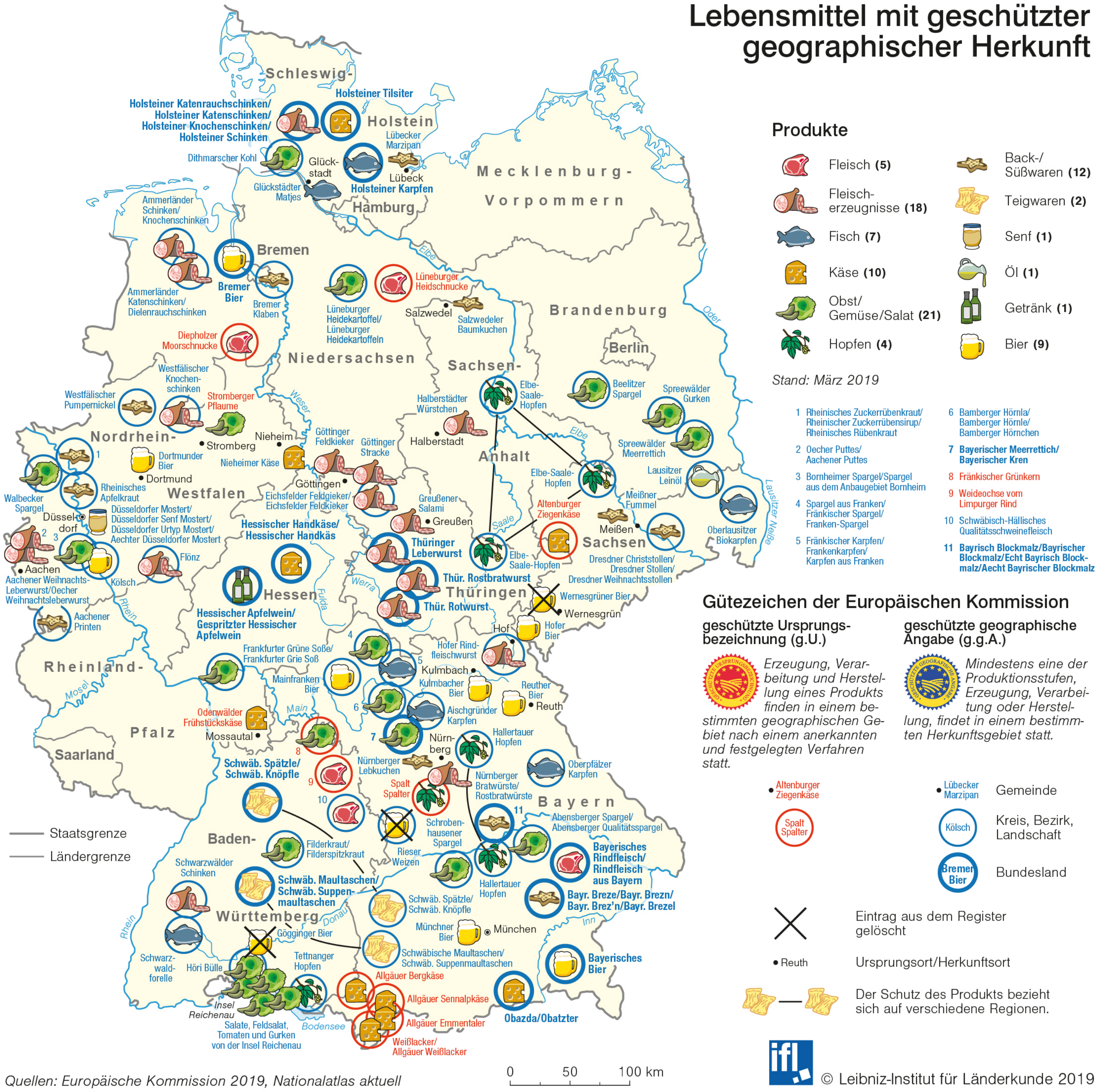

Figure 18 Map of German Quality Labeled Products

(Bundesministerium für Ernährung und Landwirtschaft, 2020 c)

Appendix B – English Questionnaire

This questionnaire is part of my bachelor thesis and aims to give a better understanding about the perception of German consumers on local food. With your participation you would help me a lot to get deeper knowledge of the topic. The questionnaire should take you around five minutes.
Thank you for your help in advance!

1. **In which state of Germany are you living?**
    - All 16 states of Germany listed to choose from
2. **Are you living in an urban or a rural area?**
    - Urban
    - Rural
    - In between urban and rural
    - None of the above
3. **How old are you?**
    - 18-24
    - 25-34
    - 35-50
    - Over 50
4. **Which education degree do you have?**
    - List of most popular German education degrees to choose from
5. **What do you consider local food?**
    - From any country in the EU
    - From Germany only
    - From my own state
    - From my own region
    - From my own garden
    - None of the above
6. **Are you only considering a food product as local when all production steps (growing, producing, packaging, etc.) are taking place nearby?**
    - Yes, all production steps have to take place nearby for me to consider a product as local
    - No, if products are produced nearby but the raw materials are not coming from nearby I am still considering it local
    - If something in the production happened nearby I am considering it as local
    - None of the above
7. **Where do you buy local food products?** (multiple answers possible)
    - Supermarket
    - Organic shop
    - Farmers market
    - Farm shop
    - Online shop
    - Grocery boxes

- Others: Field to fill in own text
- I don’t buy groceries

8. **Rank your motives for buying local products?** (Ranking scheme from 1 highest motivator to 6 lowest motivator)
    - Fresher, healthier and more seasonal products
    - Direct and personal contact to producers (e.g. at farm shops or markets)
    - Eco-friendlier due to shorter transportation
    - Higher transparency and security
    - Fair prices for local farmers and support own economy
    - Products of higher quality (organic, biodynamic, etc.)
9. **Choose how you would like to be informed about the local origin of a product?** (multiple answers possible)
    - Label/logo on the products packaging
    - Information sign in the supermarket
    - Direct contact with an informed person
    - None of the above
    - I do not want to be informed about local foods origin
10. **Do you buy products with the PDO or PGI label?** (picture of PDO/ PGI label)
    - Yes
    - No
    - I have never seen these labels before
11. **Do you find the PDO/PGI label helpful when looking for local foods?**
    - Yes
    - No
    - Partly
    - I don’t know
12. **Do you buy products with the Regionalfenster label?** (picture of the Regionalfenster)
    - Yes
    - No
    - I have never seen this label before
13. **Do you find the Regionalfenster label helpful when looking for local food?**
    - Yes
    - No
    - Partly
    - I don’t know
14. **Do you buy products with the German quality labels?** (picture of all 14 German quality labels)
    - Yes
    - No
    - I have never seen these labels before

15. Do you find the German quality labels helpful when looking for local food?

- Yes
- No
- Partly
- I don’t know

16. Comments and thoughts about local food labelling? (space to write)

Appendix C: Electronic Survey (German)

Qualitäts- und Ursprungskennzeichnungen regionaler und lokaler Lebensmittel

Dieser Fragebogen dient meiner Bachelorarbeit an der Aeres University of Applied Science und erforscht die Wahrnehmung von Ursprungskennzeichnungen von Lebensmittel an Deutschen Konsument:innen. Ihre Teilnahme würde mir sehr helfen, Informationen über die Wahrnehmung zu sammeln und dauert circa 5 bis 10 Minuten. Alle Angaben sind anonym und werden rein für die Bearbeitung meiner Bachelorarbeit verwendet.
Vielen Dank für Ihre Mithilfe!

1. In welchem Bundesland leben Sie?
   () Bayern
   () Niedersachsen
   () Baden-Württemberg
   () Nordrhein-Westfalen
   () Brandenburg
   () Mecklenburg-Vorpommern
   () Hessen
   () Sachsen-Anhalt
   () Rheinland-Pfalz
   () Sachsen
   () Thüringen
   () Schleswig-Holstein
   () Saarland
   () Berlin
   () Hamburg
   () Bremen

2. Leben Sie urban oder ländlich?
   () Urban (in der Stadt)
   () Ländlich
   () Zwischen urban und ländlich
   () Keines der oben genannten Optionen

3. Wie alt sind Sie?
   () 18-24
   () 25-34
   () 35-50
   () Über 50

4. Welcher ist Ihr höchster Schul- und Hochschulabschluss?
   () Kein beruflicher bzw. Schulabschluss
   () Hauptschulabschluss
   () Realschulabschluss
   () Abitur und gleichwertiger Abschluss
   () Ausbildungsabschluss
   () Studium ohne Abschluss
   () Bachelor-Abschluss
   () Master-Abschluss
   () Doktor-Grad
   () Sonstiges

5. Wie definieren Sie regionale/ lokale Lebensmittel?
   () Aus europäischen Ländern
   () Aus Deutschland
   () Aus dem Bundesland, in dem ich lebe
   () Aus der Region, in der ich lebe
   () Aus meinem eigenen Garten
   () Sonstiges

6. Betrachten Sie ausschließlich Lebensmittel, bei welchen alle Produktionsschritte (z.B. Anzucht, Ernte, Produktion, Verpacken, etc.) in Ihrer Nähe stattgefunden haben als regional/ lokal?
   () Ja, alle Produktionsschritte müssen in meiner Nähe stattgefunden haben, damit ein Produkt für mich regional/ lokal ist
   () Nein, wenn Produkte in meiner Nähe produziert worden sind, die Zutaten aber nicht aus meiner Nähe kommen, ist das Produkt trotzdem regional/lokal für mich
   () Nein, wenn irgendein Schritt der Produktionskette in meiner Nähe stattgefunden hat, ist das Produkt für mich regional/ lokal
   () Keine der obigen Antworten

7. Wo kaufen Sie am Häufigsten regionale/ lokale Lebensmittel?
   () Supermarkt
   () Biomarkt
   () Bauernmarkt
   () Online Shop
   () Lebensmittelboxen
   () Ich kaufe keine regionalen/ lokalen Lebensmittel
   () Weitere…

8. Bestimmen Sie die Reihenfolge, wie stark Sie folgende Faktoren beeinflussen, regionale/ lokale Lebensmittel zu kaufen (1 größter Einfluss, 6 geringster Einfluss, jede Zahl kann nur einmal verwendet werden pro Spalte und pro Faktor, es soll eine Rangfolge entstehen).
   - Frischere, gesündere und saisonale Produkte
   - Direkter und persönlicher Kontakt zu Produzenten (z.B. auf Bauernmärkten)
   - Umweltfreundlich dank kürzerer Transportwege

- Höhere Transparenz und Sicherheit der Lebensmittel
- Faire Preise für Produzenten und Unterstützung der eigenen Ökonomie
- Qualitativ hochwertigere Produkte (biologisch, biodynamisch, etc.)

9. Wie würden Sie am liebsten über die Herkunft Ihrer Lebensmittel informiert werden?
   () Kennzeichnung auf der Verpackung des Produkts
   () Informationen im Supermarkt
   () Direkter Kontakt mit einer kompetenten Fachkraft
   () Keines der oben genannten Optionen
   () Ich möchte nicht über der Herkunft meiner Lebensmittel informiert werden

10. Kaufen Sie Produkte mit der geschützte Ursprungsbezeichnung (g.U.) oder der geschützten geografischen Angabe (g.g.A.) Kennzeichnung, welche auf dem Bild zu sehen sind? (Bild vom g.U. und g.g.A. Siegel)
    () Ja
    () Nein
    () Ich habe diese Kennzeichnung noch nie gesehn

11. Finden Sie die g.U. und g.g.A. Kennzeichnung hilfreich, wenn Sie nach regionalen/ lokalen Lebensmitteln suchen?
    () Ja
    () Nein
    () Teilweise
    () Keine Angabe

12. Kaufen Sie Produkte mit der Regionalfenster Kennzeichnung, welche im Bild zu sehen ist? (Bild vom Regionalfenster)
    () Ja
    () Nein
    () Ich habe diese Kennzeichnung noch nie gesehen

13. Finden Sie die Regionalfenster Kennzeichnung hilfreich, wenn Sie nach regionalen/ lokalen Lebensmitteln suchen?
    () Ja
    () Nein
    () Teilweise
    () Keine Angabe

14. Kaufen Sie Produkte mit den Qualitätszeichen der Bundesländer, welche auf dem Bild zu sehen sind? (Bild aller 14 Qualitätszeichen der Bundesländer)
    () Ja
    () Nein
    () Ich habe diese Kennzeichnung noch nie gesehen

15. Finden Sie die Qualitätszeichen der Bundesländer hilfreich, wenn Sie nach regionalen/ lokalen Lebensmitteln suchen?
    () Ja
    () Nein

() Teilweise
() Keine Angabe

16. Haben Sie Kommentare und Anmerkungen zu den Ursprungskennzeichnungen?
(…)

Appendix D: Comments from the Survey (German)

1. Einheitliches, gut nachvollziehbares Gütesiegel würde die Angelegenheit deutlich vereinfachen und sicherlich die Anzahl der such danach entscheidenden Verbraucher erhöhen!
2. Ich würde mir diese Kennzeichnungen häufiger auf Produktverpackungen wünschen.
3. Meiner Meinung nach sind die Kennzeichnungen zu klein und werden an Stellen angebracht, die nicht sofort ins Auge springen. Man muss sich Produkte genau anschauen, um diese Informationen zu erhalten. Eine deutlichere und sichtbarere Kennzeichnung würde es meines Erachtens nach fördern, dass regionale Produkte gekauft werden, da es das Bewusstsein der Leute gegenüber regionalen Produkten steigern würde.
4. Sie sollten einheitlicher und gut sichtbar auf den Verpackungen, sowie den Preisauszeichnungen bzw. Schildern angebracht sein.
5. Weites gehend sind mir die Kennzeichnungen unbekannt. Bei Obst und Gemüse beachte ich das Ursprungsland, aber auch hier war ich mir keiner Siegel bekannt, allerdings achte ich auf Bio-Siegel wie bspw. Demeter.
6. Bessere Sichtbarkeit auf den Produkten wäre wünschenswert.
7. Die Vielzahl der Kennzeichnungen ist für den Verbraucher irreführend und verwirrend. Sinnvoll wäre eine Vereinheitlichung.
8. Die sehe ich sehr, sehr selten im Supermarkt.
9. Ein Siegel muss irgendwie ein trust feeling hervorrufen.
10. Es gibt zu viele, die auch noch uneinheitlich sind. Der Konsument wird nur dadurch verwirrt.
11. Ich mag am Liebsten diese kleine pop-up Kennzeichnungen, die man jetzt mehr in Supermärkten für vegane Produkte sieht.
12. Je einfacher zu verstehen desto besser.
13. Es fehlt da ein Landes- oder auch Europaweiter, einheitlicher und verlässlicher Standard.
14. Sie sollten größer und präsenter platziert werden.
15. Vor allem bei tierischen Produkten wären Angaben zu Herkunft, Haltung und Verarbeitung hilfreich.
16. Wichtiger als die Regionalität ist die Herstellung nach anerkannten und zertifizierten ökologischen Standards (Demeter, Bioland).

Appendix E: Tables of Statistical Analysis

Table 1 Chi-Square test on definition of local food and living area

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.135[a]	8	.057
Likelihood Ratio	15.386	8	.052
Linear-by-Linear Association	6.142	1	.013
N of Valid Cases	248		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .30.

Table 2 Chi-Square test on definition of local food and education

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.285[a]	16	.367
Likelihood Ratio	18.251	16	.309
Linear-by-Linear Association	1.051	1	.305
N of Valid Cases	248		

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .01.

Table 3 Chi-Square test on definition of local food and age range

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.868[a]	12	.070
Likelihood Ratio	20.265	12	.062
Linear-by-Linear Association	14.453	1	.000
N of Valid Cases	248		

a. 10 cells (50.0%) have expected count less than 5. The minimum expected count is .15.

Table 4 Chi-Square test on places to buy local foods and living area

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.276[a]	10	.002
Likelihood Ratio	31.636	10	.000
Linear-by-Linear Association	1.897	1	.168
N of Valid Cases	248		

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .30.

Table 5 Chi-Square test on places to buy local foods and age range

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.267[a]	15	.079
Likelihood Ratio	23.827	15	.068
Linear-by-Linear Association	.278	1	.598
N of Valid Cases	248		

a. 8 cells (33.3%) have expected count less than 5. The minimum expected count is .15.