

Consumer Attitudes towards Regional Food Products - A Case-Study for Northern Germany -

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1. Introduction

Globalization is one of the major trends of our time. Regionalization may be understood as a counter movement against this trend. In many countries we observe an increasing consumer interest in products of the own region or country. In this case-study we investigate the consumer attitudes towards regional food products in Schleswig-Holstein. We measured the preferences and tried to estimate the willingness to pay for regional food applying conjoint analysis and explored the attitudes which are related with the consumer preferences for regional food. The empirical basis is a consumer survey (random sample, 265 face-to-face interviews) conducted in summer 1998 in the city of Kiel.

2. Measuring the preferences for regional food by conjoint analysis

2.1. Design

The conjoint analysis has been carried out for two products: butter and fresh potatoes. Each product has been described by three attributes (price, brand and origin label) at three levels (chart 1). The three brands got fictitious names, one of them with a regional reference (Holsteiner Butter, Holsteins Beste). The used origin labels were the official Schleswig-Holstein quality label and a simple, but large imprint „Aus Schleswig-Holstein“ competing with products without origin label. The total design consisted of 81 profiles, which have been reduced to 9 profiles. These stimuli have been offered to the test persons on coloured cards simulating the total appearance of the products (chart 2). The test persons have been asked to rank the test products according to their preference. The data set has been analysed with the software package SPSS 6.1.

2.2. Results

The results of the conjoint analysis are shown in chart 3:

In the case of butter the relative importance of the attributes was 40 % for the price, 24 % for the brand and 36 % for the origin label. The brand with the regional reference („Holsteiner Butter“) got a positive part worth, the part worths of the competing brands were negative. The part worths of the origin labels were positive, too, while the product without an origin label received a negative part worth.

In the case of potatoes the relative importance of the attributes was 33 % for the price, 27 % for the brand and 40 % for the origin label. The part worths of the attribute levels showed a

similar pattern as in the case of butter. The origin of potatoes seems to have more importance for the consumer than the origin of butter.

From these results the following conclusions can be drawn:

1. Food products, which are perceived to originate from the own region are preferred to products with an unknown origin. Brands and labels indicating the regional origin of the product have a positive part worth. However: The regional origin of a product may be a decisive criterium in the buying process, only if the differences between the product alternatives are low. Especially, if the competing products are strong brands, the preferences for products of the own region are expected to be less pronounced. Unfortunately, we were not in the position to test this hypothesis within our investigation. Furthermore, it can be expected, that the conjoint analysis tends to overestimate the influence of the labels, because in real purchasing situations the stimuli are less recognized than in the test situation.
2. There seem to be no significant differences between the different methods of labeling. There is no indication, that the official regional quality label is superior to a brand with regional reference or a simple imprint. The regional quality label is well known in the region, however its size is rather small and for this reason it may have more difficulties attracting the buyer's attention to the regional origin of the product than a brand name or an imprint, which can be integrated into the total product design more easily.

In fact, many consumers claim to have problems recognizing the regional origin of the food products (chart 4). The responses to an open question revealed that the regional quality label and imprints are the most frequent marks to identify the regional origin (chart 5). Food suppliers intending to make use of the consumer preferences for food of the own region, should pay particular attention to the problem, how to support the consumer's perception process. The origin label can influence the buying decision, only if the label is perceived by the consumer.

3. Willingness to pay

Within the conjoint analysis for each test person the part worths (utilities) of each attribute level are calculated. Since one of the attributes is the price, the utilities of the other attributes can be converted into price equivalents. These price equivalents can be interpreted as the willingness to pay for a certain attribute level in the particular test situation. Example: The calculated difference between the part worth of the regional brand and another brand can be converted into a price equivalent indicating the premium the test person is willing to pay for the regional brand compared to the other brand. Since these price equivalents are differing between the test persons, demand curves can be constructed showing, how many persons are willing to pay a certain premium for the brand or label. Chart 6 and 7 are giving examples of such demand curves: 62 % of the test persons are willing to pay more for the brand „Holsteiner Butter“ than for butter with the brand „Gute Butter“. 68 % of the test persons are willing to pay more for butter marked with the imprint „aus Schleswig-Holstein“ than for unlabeled butter. These curves may have some relevance for pricing food products of regional origin. In addition they can help estimating the brand equity of a label of origin or a regional brand.

4. Importance of the regional origin by products

The consumer preferences for the regional origin are differing between products (chart 8). The test persons have been asked to assess the importance of the regional origin for a selection of 14 food items on a scale from 1 to 5. The highest scores have been given to eggs, meat, milk, fish, milk products, vegetables, bread/bakeries and sausages, medium scores have been given to fruit and cheese, while in the case of deep frozen vegetables, noodles, ready dishes and canned food the regional origin has less importance. Conclusion: The preference for food products of the own region is especially high for fresh products and much lower for preserved food. In the case of fresh fruit many test persons may have recognized the fact, that some fruits cannot be grown in Schleswig-Holstein for climatical reasons. In the case of cheese many products from other countries, especially from France, have a rather good reputation.

5. Determinants of the preferences for food of the own region

What are the factors determining the preference for food of the own region? On the search for such determinants we found the following consumer attitudes/beliefs/intentions correlating positively at least partly with the preferences for regional food, we have estimated in the conjoint analysis. Each of these attitudes has been measured by two statements, which have been rated by the test persons on a five-point scale:

1. The willingness to pay for regional products
2. The preference for food from Germany
3. The preference for food of the own region
4. The willingness to support the regional agriculture
5. The preference for regional products because of shorter transportation routes
6. The attachment to the homeland
7. Alienation
8. Concern about food safety
9. Environmental concern
10. Health consciousness
11. Neophobia

A correlation matrix showed that these variables are partly interrelated, however the results of different factor analyses have not been satisfactory. The causal structure of these variables remains unclear.

Some additional hints are given by the answers to a projective sentence-completion test (Chart 9). The test persons have been asked to complete the sentence: „I buy products from Schleswig-Holstein, because....“ The most frequent answers could be classified as follows:

- better product properties (fresher, better quality, better taste, more healthy),
- better production conditions (more natural, shorter transport routes, more confidence, not genetically modified), furthermore
- support of the regional agriculture.

It is interesting to note that „patriotic“ arguments have been rare.

Furthermore the preference for regional food can be interpreted as an image transfer between

the region and the product (v.Alvensleben/Gertken, 1993, Schleyerbach/v.Alvensleben, 1998): Most people living in a certain region are developing emotional relations to their homeland. These emotions are transferred to the products of this region. In this case the information about the origin of the product may become a cue or a key attribute in the process of product perception, especially if other cues or key attributes (e.g. a strong brand) are not available. The positive emotional attitude towards products of the own region may lead to further positive perception distortions - halo effects - (see also: Han, 1989), which can explain the rather positive evaluations of regional products in the sentence-completion test.

6. Conclusion

Altogether the determinants of the consumer preferences for food products of the own region are rather complex. To obtain a deeper insight into the causal relations between the different variables, it seems to be necessary to develop causal models (example: van Ittersum/Candel, 1998), which was not possible within the scope of this study. We are looking forward to the presentations and discussions of this workshop, which may give ideas, how to proceed in further research.

7. Summary

The case-study is based on a consumer survey (n = 265) conducted in summer 1998 in Kiel. Applying the conjoint analysis the following results have been obtained:

1. Food products of the own region are preferred to products with an unknown origin.
2. A majority of the consumers is willing to pay more for a product of the own region than for products with an unknown origin.
3. The regional preference is higher for fresh products than for preserved food.
4. The preference for regional food can be interpreted as an image transfer between the region and the product: The regional origin may become a cue or a key attribute in the perception process which leads to positive perception distortions.
5. A deeper insight into the complex causal structure of the determinants of the consumer preferences for regional food requires the development of causal models.

References:

v. Alvensleben, R., Gertken, D. (1993): Regionale Gütezeichen als Marketinginstrument bei Nahrungsmitteln. *Agrarwirtschaft* 42, S. 247-251.

Han, C.M. (1989): Country image: Halo or summary construct? *Journal of Marketing Research*, Vol. XXVI, P. 222-229.

van Ittersum, K., Candel, M.J.J.M. (1998): The influence of the image of a geographical area on the evaluation of food products. AIR-CAT workshop „Consumer preferences for products of the own region/country and consequences for the food marketing“, Kiel 23.-26.4.1998.

Schleyerbach, K., v. Alvensleben, R. (1998): The problem of labeling and branding regional products. AIR-CAT workshop „Consumer preferences for products of the own region/country and consequences for the food marketing“, Kiel 23.-26.4.1998.

Chart 1: Design of the Conjoint-Analysis

Product	Attribute	Attribute levels
Butter	Price	1,89 DM/pound
		2,19 DM/pound
		2,39 DM/pound
	Brand	“Wiesengrund“
		”Holsteiner Butter“
		”Gute Butter“
	Origin label	Schleswig-Holstein- Quality-Label
		” Aus Schleswig-Holstein“
		without
Potatoes	Price	1,40DM/kg
		1,60DM/kg
		1,80DM/kg
	Brand	“Feldknolle“
		“Holsteins Beste“
		“Bauernlob“
	Origin label	Schleswig-Holstein- Quality-Label
		” Aus Schleswig- Holstein“
		without

Source: Institute for Agricultural Economics University Kiel.
Consumer survey Kiel 1998 (n = 265).

Chart 2: Conjoint-Stimuli



Chart 3: Results of the Conjoint-Analysis

Butter			
Attribute	Attribute Level	Relative Importance	Part Worth
Price	1,89 DM/pound	40 %	+ 1,21
	2,19 DM/pound		+ 0,01
	2,39 DM/pound		- 1,22
Brand	“Wiesengrund“	24 %	- 0,40
	“Holsteiner Butter“		+ 0,81
	“Gute Butter“		- 0,41
Origin label	SH-Quality-Label	36 %	+ 0,39
	„Aus SH“		+ 0,52
	without		- 0,91
Potatoe			
Attribute	Attribute Level	Relative Importance	Part Worth
Price	1,40 DM/kg	33 %	+ 0,91
	1,60 DM/kg		- 0,01
	1,80 DM/kg		- 0,90
Brand	“Feldknolle“	27 %	- 0,28
	“Holsteins Beste“		+ 0,64
	“Bauernlob“		- 0,36
Origin label	SH-Quality-Label	40 %	+ 0,69
	„Aus SH“		+ 0,52
	without		- 1,21

Source: Institute for Agricultural Economics University Kiel.
Consumer survey Kiel 1998 (n = 265).

Chart 4: Recognition of the Origin Label

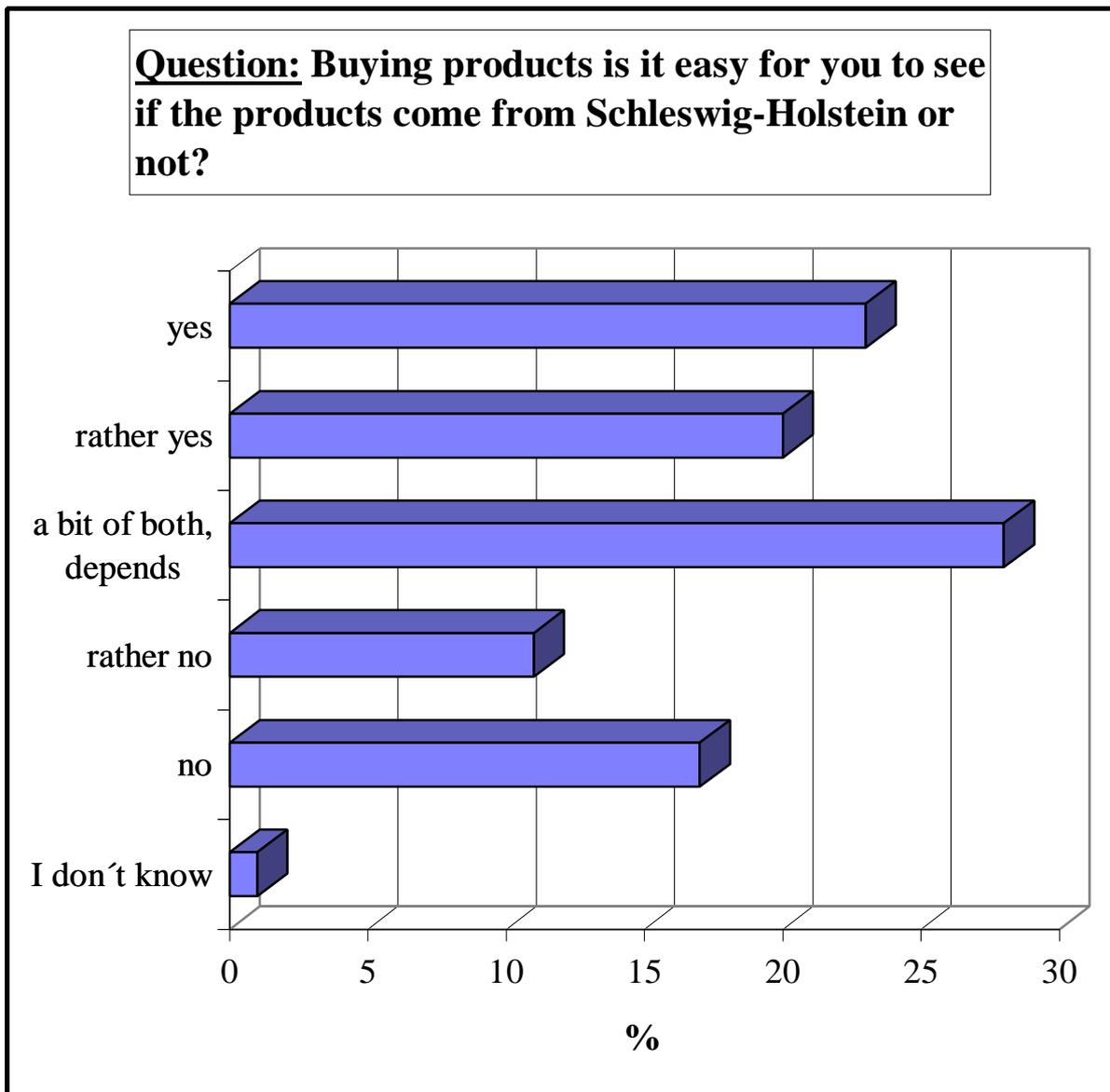
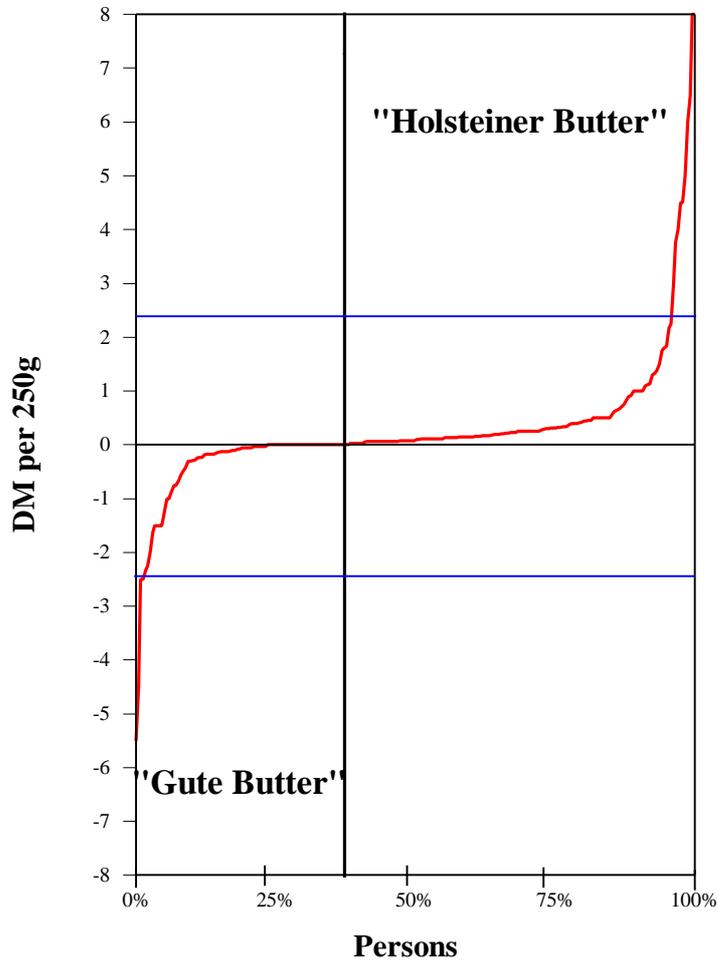


Chart 5: Question: Think about buying a product from Schleswig-Holstein. How do you recognize that the product comes from Schleswig-Holstein? (open question, multiple answers)

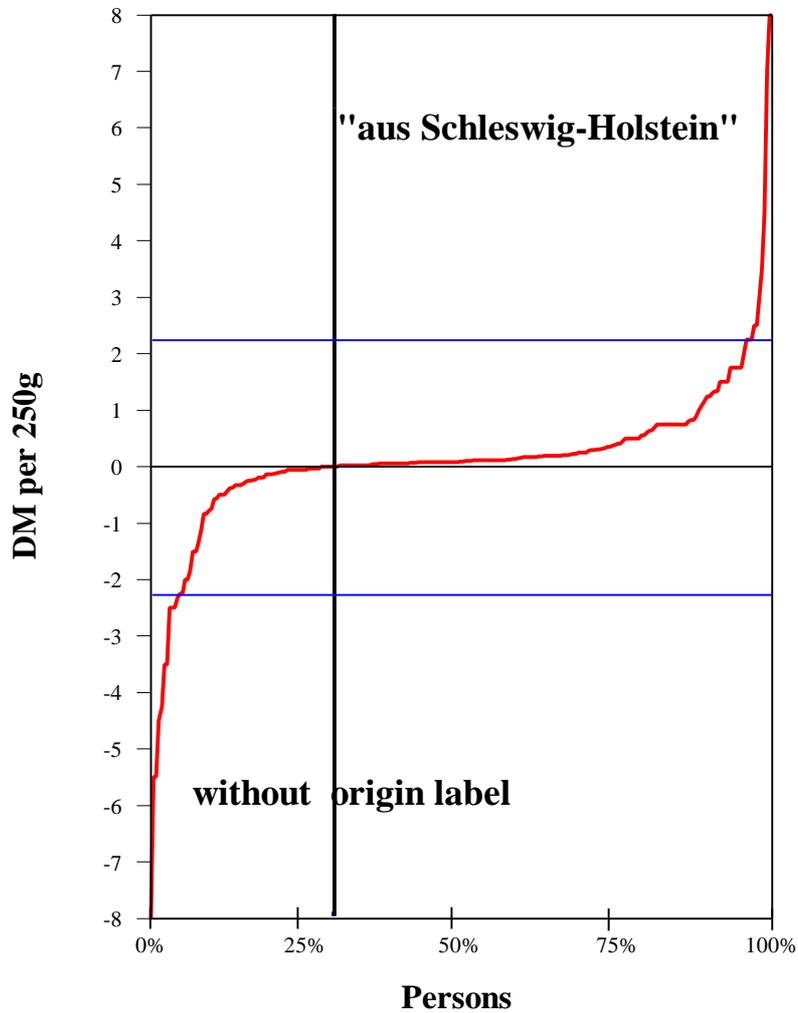
Answer Category	Frequency of Answers in %
SH-Quality-Label	49
Origin imprint	45
Typical signs of the region	18
Producer/brand	17
Adress of producers	14
Asking in the supermarket	9
Others	8
Source: Institute for Agricultural Economics University of Kiel. Consumer survey Kiel 1998 (n = 265).	

Chart: 6
Distribution of the Price Equivalents of the Brand "Holsteiner Butter" compared with "Gute Butter"



Reading: 62 % of the persons are willing to pay more for the brand "Holsteiner Butter" than for butter with the brand "Gute Butter".

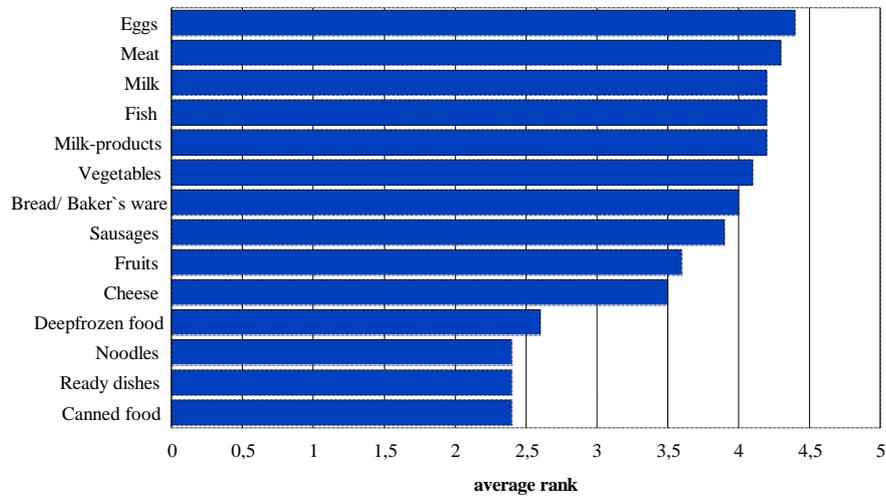
**Chart 7:
Distribution of the Price Equivalents of the Imprint
"aus Schleswig-Holstein" Compared with Unlabeled
Butter**



Reading: 68 % of the persons are willing to pay more for butter marked with the imprint "aus Schleswig-Holstein" than for unlabeled butter.

Chart 8: Importance of the Regional Origin by Products

Question: How important do you regard the Schleswig-Holstein origin in the case of eggs, ...?



Scale: 1 = not important at all, 5 = very important

Source: Institute for Agricultural Economics University of Kiel. Consumer survey Kiel 1998 (n = 265).

Chart 9: Sentence-Completion Test

Product Properties		Production Conditions		Others	
fresher	62	more natural production	42	support of regional agriculture	25
better quality	51	shorter transportation routes	34	“patriots“	13
better taste	37	more confidence	32	others	5
more healthy	31	not genetically modified	13		

Question: On this picture you can see two persons. One of the person says: “I buy products from the Netherlands because the prices are lower.” The other person answers: “I buy products from Schleswig-Holstein, because ...“
How will this person end the sentence? (open question, multiple answers)

Source: Institute for Agricultural Economics University Kiel.

Consumer survey Kiel 1998 (n = 265).

