

# Export Marketing of Slavonian Kulen: the Results of Market Research

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## SUMMARY

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The goal of this research is to estimate the possibility of export of Slavonian kulen to foreign target markets: German, Austrian, Italian and Swiss. This research determined the administrative conditions for the export of kulen to EU, and the acceptance of the product from consumer target groups. In this research we used methods of group interview, concept test and organoleptic product test.

The results of the research showed that there are no administrative obstacles for the export of kulen to EU. Consumer testing showed that German, Austrian and Swiss consumers like kulen, so these markets are suitable for export. Italian market already has a large offer of dried-meat products and therefore it is less suitable for the export of kulen.

The results of this research are a scientifically based estimate of the export possibilities for Slavonian kulen, and they provide an information basis for the creation of an export marketing program.

## KEY WORDS

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export marketing, Slavonian kulen, research

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## NOTE

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## INTRODUCTION

Following the liberalisation of Croatian food market, the largest part of domestic pig breeding industry lost its competitiveness. One way to increase the competitiveness is to create high value products for domestic, tourist and export markets. Slavonian kulen would certainly be one of these products.

In previous research (the first part of the project "Export marketing of Slavonian homemade kulen") we determined the potential markets for export of Slavonian kulen, market potential of kulen in these countries and target consumer groups. Potential export markets are: Austria, Germany, Italy and Switzerland. Export potential of these markets has been estimated on 4,5 thousand tons of kulen a year and it is not a limiting factor for the export. Finally, three target consumer segments have been set, first: gourmets in Austria, Germany, Italy and Switzerland, second: Croatians who live and work in these countries and the third target segment: foreign tourists in Croatia.

Slavonian kulen is a new product in these markets. A successful introduction of kulen into these markets is a process of systematic planning and implementation of business decisions. This process can be divided into the following sub-stages: market research, market test (trial marketing) and introducing the new product in the market (Berekoven et al., 1996). In this article we will present the results of export market research.

The goal of this research is to estimate the possibility of export of Slavonian kulen to target markets. The tasks in this research are to determine the administrative conditions for the export of kulen to EU and to determine the acceptance of the product by the target group.

The results of this research will be a scientifically based estimate of the export possibilities for Slavonian kulen, and they will provide an information basis for the creation of an export marketing program. The next step towards the export of kulen is planning, organising and implementation of trial marketing. If the trial marketing confirms the results of market research, it would be possible to introduce Slavonian kulen to target markets.

## MATERIAL AND METHODS

During the research we used multiple methodological procedures for data collection such as: group interviews, product concept test and organoleptic product test. In order to analyse data, we used univariant data analysis and conjoint analysis.

### Group interview

Qualitative research is used in international marketing research to formulate and define a problem more clearly and to determine relevant questions to be

examined in subsequent research» (Cateora, 1996, p. 200). «The most widely used form of qualitative questioning in marketing research is the focus group interview which involves interviewing 6 to 10 people» (Perreault & McCarthy, 1996, p. 162).

In the research of potential markets, seven group discussions (focus groups) with tasting were conducted, in all four target markets. Two focus groups with 15 consumers were conducted in Germany, (Nuremberg) in April 2002, in Salzburg (Austria), there were two focus groups with 16 consumers, in Bologna (Italy) two focus groups with 16 participants, and in Zurich (Switzerland) one focus group with 6 participants. One focus group lasted an hour and a half on average.

The goal of these group interviews was to gather information about the attitudes and behaviour patterns in dried meat products consumption, consumer demand for premium dried meat products and for kulen (psychological background of kulen consumption), and perceived and desired characteristics of the product. After the tasting, respondents rated the quality of kulen and set their "threshold" price.

Data gathered in focus groups were analysed through the method of content analysis. The results of focus groups were used to compile a survey used for conducting the concept product test. Besides that, the results of focus groups also give the first information for forming marketing mix. Original statements of the participants are very interesting because they are the basis for forming a promotion strategy (see Cateora, 1996, p. 201)

### Concept test

The goal of the concept test was to determine optimal combination of relevant characteristics for premium sausages in these target markets. Concept test is used to explore the ideas about the new product, that is, it explores how the potential consumer understands the function of the product and how he sees the utility offered by the product (Marušić, Vranešević, 2001). The product is described as a sketch or a model, and if it exists, the real product can also be shown (see Berndt, 1996). Whether it is a "one-on-one" or a group interview, respondent(s) rate the product and thus express their preferences toward a certain product.

In September 2002 the survey with foreign tourists was conducted in Istria. A total of 331 concept test was made, 109 with German consumers, 98 with Italian consumers, 93 with Austrian consumers and 29 tests with Swiss consumers. Test lasted about 45 minutes per participant.

We used conjoint analysis method (CA) to determine consumer preferences. "Conjoint analysis has been widely used in marketing to evaluate consumer

preferences for hypothetical products and services. It is ideally suited for understanding how consumers value various product attributes based on their valuation of the complete product” (Baker et al., 2001). “Conjoint analysis is a technique that models the nature of consumers trade-offs among multi-attribute products or services. The model assumes that alternative product concepts can be defined as a series of specific levels of common set of attributes” (Murphy et al., 2000). It is used for establishing the relative importance of different product attributes and their levels (Van der Pol, Ryan, 1996).

The results of the concept test (analysed with CA) give us information about the optimal combination of attributes and their levels for Slavonian kulen. Using this survey we also tested other important characteristics that helped us determine consumer preferences. Also, the most important aspects of buying and consumption behaviour of dried meat specialities were tested.

Attributes and levels used in CA were obtained using the content analysis of focus groups, literature study and expert interviews. The final selection of attributes and levels was made after the pilot research with foreign consumers. In the conjoint analysis we used five attributes and eleven levels of kulen.

Table 1. Attributes and levels used in conjoint analysis

Attributes	Levels
Composition	meat I and II category meat I and II category and hard fat
Type of animal breeding	free conventional
Price	35 euro/kg 45 euro/kg 55 euro/kg
Additives	natural additives (salt, garlic, paprika) industrial additives (nitrates, preservatives)
Independent institution control	yes no

When it comes to composition of Slavonian kulen, producer can only offer kulen made of I and II category meat or a combination of I and II category meat and 10% hard fat. In some parts of Slavonia, for example Županjska Posavina, it is a tradition to use only meat of first (80%) and second category (20%) for the production of kulen while in the area near Požega it is customary to add 10 % of hard fat also.

Slavonian kulen is traditionally produced of meat of pigs that were “held” in the forest and fed with acorn. Today, mostly because of legal obstacles, it is hard to achieve the same conditions of animal breeding as they were before. However, it is possible to organise free-type breeding in a confined space.

Natural additives such as salt, garlic and paprika are used in the production of Slavonian kulen. Some producers, especially large ones, use industrial additives such as nitrate salts and preservatives.

We set three price levels, 35, 45 i 55 Euro/kg of Slavonian kulen. Cheaper versions of kulen can be produced with industrial additives, conventionally bred pigs and by adding more fat.

The last attribute used in CA is with / without quality control of Slavonian kulen in the importing country.

### Organoleptic product test

The goal of the product test (organoleptic analysis) was to optimise the product core of Slavonian kulen according to the demands of specific target markets. For each market we should determine an optimal combination of organoleptic characteristics that consumers prefer. The results of the organoleptic analysis show us the “wishes” of consumers, i. e. the recipe that must be “translated” into specific ingredients of kulen to make a specific product. Of course, the possibility of changing the traditional product such as Slavonian kulen is limited because of traditional production procedures and the quality of input material.

The organoleptic test was conducted in September 2002 with four target groups of foreign tourists who were on vacation in Croatia. We tested 28 German, 24 Italian and Austrian and 22 Swiss consumers. Each participant tasted and gave his opinion about three samples of kulen. The rating of the product is based on the quantitative and descriptive analysis, in the form of monadic blind test. As a part of quantitative analysis respondents rated the samples of kulen considering these characteristics: smoked, plastic, mushy, greasy, spicy, juicy, piquant, acid, dry, metal taste.<sup>1</sup> The ratings were given on a 5-point Likert-type scale (5 = completely true, 1 = not at all true). Test took about 15 minutes per respondent.

We used three types of kulen for testing, with the following characteristics:

Kulen A: I and II category meat and fat, industrial additives, umjerena pikantnost i spiciness, 2-3 smokes.

Kulen B: I and II category meat, natural additives, very piquant and spicy, 10 – 15 smokes,

Kulen C: I, II and III category meat and fat, industrial additives, medium piquant, 5 –6 smokes, a flaw in kulen: not mature enough,

Besides organoleptic analysis, respondents had to read a list of statements and choose the ones they agree with, as a sort of image analysis. This analysis

<sup>1</sup> The characteristics for the organoleptic analysis were obtained in the pilot research

serves for the characterisation of the product and for the comparison of kulen with similar products, from consumers' point of view.

## RESULTS AND DISCUSSION

### Legal requirements for the export of Slavonian kulen to EU

Information regarding the possibility of export of kulen and similar fermented products and their adherence to sanitary and veterinary conditions were collected from several sources. After studying the European legislation, relevant institutions in the European Commission have been contacted: DG SANCO (General Directorate for health and consumer protection) and DG Agri (General Directorate for agriculture). Valuable information was also obtained from consultants working on the synchronization of Croatian veterinary regulations with those in the EU.

#### *General and special conditions for the export of meat products from Croatia to EU*

Based on veterinary regulations currently valid in the EU member countries, conditions for the export of these products have been stipulated. The basic conditions are:

1. Croatia must be on a list of countries from which these products are approved
2. The export must be handled through an approved object
3. The products must have a certificate that guarantees health safety.

Besides that, Croatia must have an approved monitoring plan for pig meat residues.

The export of live pigs from Croatia is not possible because of swine plague vaccination, which is evident from the list of countries that were granted permission to export to EU. However, this limitation does not apply for pig meat products, including kulen, under the condition that they are produced in a certain way.

Fermented pig meat products coming from Croatia must meet the following conditions:

- Duration of natural fermentation and maturation should be at least nine months,
- Aw value not higher than 0,93,
- pH value not higher than 6,0.

Having in mind that the production of Slavonian kulen has the following characteristics: duration of fermentation between nine and twelve months, low acidity (pH value from 5.0 to 6.0) and  $a_w < 0.90$ , we can say that Slavonian kulen meets these conditions.

The export of animal products to EU can be realised only if the exporting facility is registered for the

export to EU. At this moment, there are only three companies in Croatia who have the export number for the export of processed meat to EU countries. These are: PIK Vrbovec, Danica and Gavrilović. To meet this condition for the export of Slavonian kulen, the producer must obtain the export number for the EU. In the experience of companies who got an export number, this procedure can be very demanding and it takes a year to be completed.

If the conditions 1 and 2 have been met, filing for a certificate is just a formality, not an additional requirement or a trade restriction.

#### *Trade regulations for the export of kulen from Croatia to EU*

In September 2002, European Commission made a decision to suspend the customs for products imported from countries included in the process of stabilization and association. This decision applies to all agricultural and food products with three exceptions, and these are: baby beef products, wine and some fish and fish products.

Stabilization and Association Agreement (SAA) was signed in October 2001, and its stipulations about the liberalization of trade between Croatia and European Union are being implemented since January 1, 2002. It confirms the earlier decision of EU Council about the possibility of Croatian customs-free export to EU.

On the other hand, these customs-free stipulations apply only in case of fulfilment of conditions of preferential origin. Preferential origin is proven by submitting the EUR 1 certificate, or by exporter's statement on the invoice or any other commercial document. The Stabilization and Association Agreement clearly defines the ways of determining and proving the origin of the product.

For the export of meat and meat products, the following rules of preferential origin apply:

- in the export of livestock the principle of "entire product" applies, meaning that livestock can be exported from Croatia to EU without paying customs only if the cattle is born and bred in Croatia;
- in the export of meat the principle of "entire product" also applies meaning that meat can be exported from Croatia to EU without paying customs only if the cattle is born and bred in Croatia;
- in the export of processed meat products (this includes kulen) preferential export can be realised even in the case of imported livestock whose meat was then used in the production of processed product. In case of meat import, the processed product cannot get a preferential origin.

Since Slavonian kulen fulfils the requirements of preferential origin the export of kulen would be customs-free.

### Market acceptability of Slavonian kulen

#### *The results of conjoint analysis*

According to the results of Conjoint-analysis there are differences in preferences for dried meat products in target markets. In the Swiss, Austrian and German market, consumers give the highest priority to the type of animal breeding, while in Italian market the most important attributes are additives and composition of the product. Independent institution control in the importing country has bigger importance in the Swiss and German market than in the Austrian and Italian market. Price has the biggest importance in the Italian market, and the smallest in the Swiss market (Table 2).

Using the data about the partial utilities, we calculated the combinations of attribute levels which give the maximal utility for consumers in the target markets. In the German market "optimal" Slavonian kulen is made of meat and natural additives, free type of animal breeding, quality and authenticity of kulen is checked by German institution. The price of this kulen is 55 Euro / kilo. Total utility for this concept is 9,9103. All other combinations of modaliteta yield smaller total utility. Austrian consumers prefer the same product concept and the utility for this concept is 8,9818. Here we have an unusual direction of this relation because consumer utility increases as the price increases.

Italian consumers prefer kulen made of meat, free type of animal breeding, natural additives, control

and the price of 35 Euro per kilo. Total utility for this concept is 9,5158 utility units. Seeing that this concept, due to the low price, is not realistic we will consider two alternatives. In relation to the first concept, if we raise the price from 35 to 55 Euro/kg, utility is reduced by 0,6558 utility units and we get the total utility of 8,8600 units. If we change the variable of breeding type, and change the free type of breeding with closed type, and the price remains 35 Euro / kg, total utility reduces by 1,8082 units with total utility of 7,7076 units. Therefore, the increase in the utility because of lower price is not enough to compensate for the loss of utility because of changing to closed type of breeding. It is the same for other attribute levels.

In conclusion, this concept of Slavonian kulen is realistic for the Italian market: kulen made of meat, free type of breeding, natural additives, quality control and the price of 55 Euro / kg. The same case applies to the Swiss market with total utility of such kulen of 9,3978 units.

#### *Results of the product test*

With a product test we determined the best "recipe" for Slavonian kulen in the target markets, buying intentions, frequency of buying, price threshold and the desirable place for buying and consumption of Slavonian kulen.

Respondents from all target market were divided in two groups: consumers– respondents who stated that they would certainly or probably buy kulen and non - consumers – all other respondents. Respondents from Austria, Switzerland and Germany showed a relatively high intention to buy. More than 2/3 of participants

Table 2. Importance of some attributes of dried meat products in the target markets (%)

Attribute	Germans	Austrians	Italians	Swiss
Composition	12,66	12,58	22,27	15,31
Breeding	25,65	33,62	19,06	33,82
Additives	24,72	21,24	22,93	23,34
Control	18,78	15,17	15,3	18,88
Price	18,19	17,40	20,4	8,64
Total	100,00%	100,00%	100,00%	100,00%

Source: Own research

Table 3. Optimal concept of kulen for specific target markets

	Germany	Italy	Austria	Switzerland
Basic utility	4,7134	5,9627	4,7521	5,2360
Partial utility	Meat 0,2078	Meat 0,8820	Meat 0,0380	Meat 0,3769
	Free 2,0660	Free 0,9041	Free 1,7571	Free 1,7535
	Natural 0,8141	Natural 1,2808	Natural 1,0159	Natural 1,2246
	yes 0,2986	yes 0,8141	yes 0,6325	yes 0,8575
	55 Euro/kg 1,8104	35 Euro/kg -0,3279	55 Euro/kg 0,7862	35 Euro/kg -0,1521
Total utility	9,9103	9,5158	8,9818	9,2964

Source: Own research

Table 4. Intention to buy Slavonian kulen

	Consumer*	Non-consumer	Total
Germany	71,40%	28,60%	100,00%
Austria	66,60%	33,30%	100,00%
Italy	51,70%	48,30%	100,00%
Switzerland	71,40%	28,60%	100,00%

\*Respondents who stated they would certainly or probably buy kulen  
Source: Own research

from these countries would certainly or probably buy kulen. Italian consumers showed the smallest intention of buying.

Ideal Slavonian kulen for German participants should be more smoked, of solid texture, medium fat, very spicy, juicier, more piquant, a bit acid, medium dry and with no metal taste.<sup>1</sup> Of three tested kulen, Germans prefer kulen A, then kulen B, and they rated kulen C the worst. Kulen A fits best to the consumer demands considering its spiciness, piquantness, texture, acidity, and dryness. It is somewhat greasier and less smoked in relation to ideal characteristics. Consumers also noticed an undesirable metal taste (Chart 1).

Ideal Slavonian kulen for Austrian market should have these characteristics: more smoked, solid texture, less greasy, spicier, juicier, more piquant, no acid or metal taste and medium dry.

Austrian consumers prefer kulen A, then kulen B, and the least kulen C. According to preferences of Austrian respondents, kulen A is not smoked enough, it is greasier than it should be, too spicy and not dry enough.

Ideal kulen for Italian consumers should moderately smoked, of softer texture, almost with no fat, less spicy and piquant, medium juicy and with no acid taste. Italians prefer kulen A, 2/3 of them, one quarter prefers kulen B, and only 10% kulen C. They mentioned these attributes as reasons for preferring kulen A: the best taste, the least piquant, the best composition.

Kulen A deviates from ideal values in these characteristics: acid and metal taste, less juicy, solid texture tvrdoća and very smoked. In all other characteristics it is close to desired values.

“Ideal” kulen for Swiss consumers is a bit more smoked, of firm texture, srednje mastan, more spicy and piquant, medium juicy and dry and with no acid or metal taste. Almost 2/3 ispitanih prefers kulen A, 20% kulen B, and 14% kulen C.

First impressions after tasting kulen A are that it is piquant, salty and spicy product. In relation to ideal

<sup>2</sup> In the research, consumers tasted three samples of kulen and then they gave the “recipe” for an ideal kulen. In data analysis we compared the ratings for each sample with “ideal” product values.

Table 5. The place of consumption of kulen

	Home	Restaurant	Work	Picnic
Germany	94,70%	25,00%	25,00%	70,00%
Austria	100,00%	25,00%	0,00%	25,00%
Italy	93,30%	26,70%	0,00%	33,30%
Switzerland	93,30%	0,00%	13,30%	26,70%

Source: Own research

values Kulen A is too spicy, too greasy, too dry and too smoked. Also, there is a strong acid flavour. In all other characteristics it is close to desired values.

Spontaneous opinions after tasting kulen and the choice of statements (image analysis) tell us how consumers in the target markets perceive Slavonian kulen. For German market it is these dimensions: natural, specialty, product for special occasions, less greasy than the salami, product for guests. Austrian consumers perceive kulen as: product for special occasions, specialty, product for gourmets, product for guests. Italian participants see kulen as: natural product, specialty, stimulating for the appetite, good for offering to guests. Finally, Swiss consumers perceive Slavonian kulen as a product of these characteristics: food for enjoyment, special product, product for guests, stimulates the appetite.

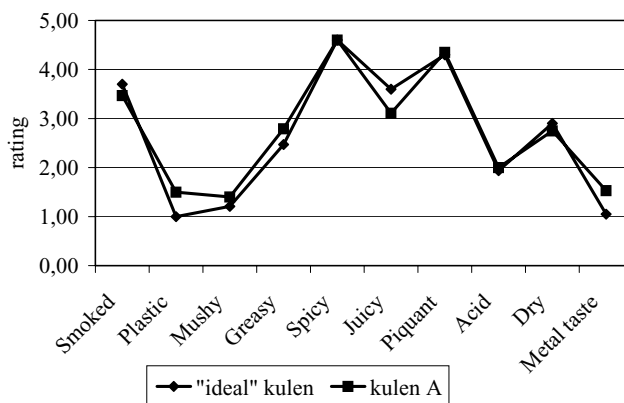


Chart 1. Deviation of kulen A from the «ideal» kulen – ratings of German respondents

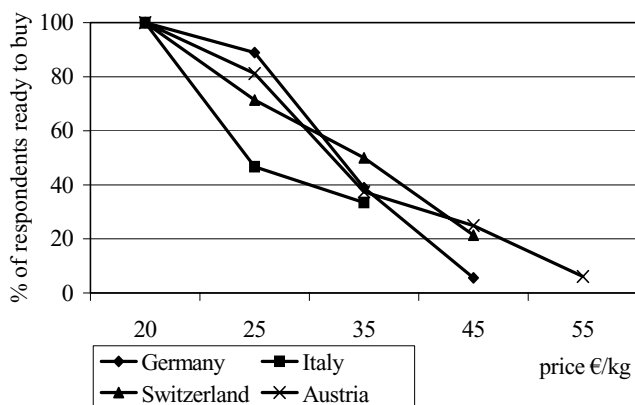


Chart 2. The demand function for kulen

These dimensions can serve for positioning Slavonian kulen in target markets and for making a promotion plan.

Most respondents would eat kulen at home. Relatively small number would order it in a restaurant. Most German participants and a small number of others would eat kulen on picnics.

In this research we also measured the price readiness of potential consumers. Italian consumers showed the smallest price readiness. Almost half of respondents would pay 25 euro / kg kulena, while only one third of respondents would pay 35 euro / kg of kulen. Five percent of consumers in German market accepts the price of 45 Euro / kg of Slavonian kulena, while 18,8% of Austrian consumers is ready to pay 45 euro / kg. 6% of Austrians would pay 55 euro / kg.

In the Swiss market nešto than one fifth of the respondents accept the price of 45 Euro / kg of Slavonian kulen. The prices mentioned here are the prices that kulen could have in specialized shops.

## CONCLUSION

There are no administrative obstacles (including veterinary) for the export of Slavonian kulen to EU market and no customs are imposed for the export of this product to EU.

The requirements for export are that the production is performed in an object approved by European Commission and that the products have a certificate that guarantees health safety.

German, Austrian and Swiss markets are suitable for export of Slavonian kulen. This estimate is based on the following research results:

- A part of consumers of dried meat products accepts the typical taste of kulen,
- Consumers have strong preferences for traditional and farmers products,
- Consumers show high (potential) buying and satisfactory price readiness,
- Consumers do not show any aversion toward foreign products,

- There are no similar substitutes in these markets,
- In these countries there is a relatively big Croatian community, who will be the first buyers and the best promoters of kulen.

Italian market is less suitable for export:

- Most consumers of dried meat products do not accept the taste of kulen,
- A lower buying and price readiness has been found,
- Consumers strongly prefer Italian products,
- There is a large offer of Italian products in the segment of dried meat products

The results of the market research were collected using the concept test and organoleptic product test. These findings have to be verified through the use of trial marketing. If the results of trial marketing confirm the results of market research, it would be necessary to start planning and organising the introduction of Slavonian kulen to target markets.

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