

PE7.35 A consumer study - How Danish consumers eat a meal with pork 349.00

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Abstract—Most Danes eat meals with pork. How do they cook the meat and what is the composition of the meal? Is there any geographical difference? In a consumer study including pork chops and pork loin roast, consumers from two parts of Denmark (metropolitan area and the provinces) received either pork chops or pork loin roast to cook and evaluate at home. The consumers were asked how the meat was cooked and served. In general, the consumers cooked the meat until it was well-done. Most consumers fried the chops in a pan and the roast in an oven. The dish with pork chops included meat, starchy foods (potatoes, rice, pasta), and vegetables. Potatoes were the most popular type of starchy foods. Large variations were seen in the choice of vegetables, carrots being the most popular. About half of the consumers served a kind of sauce to the chops; however, a geographical difference was seen. Consumers in the provinces served sauce more often compared with the Copenhagen suburb. All consumers were very traditional in the serving of pork roast as they served potatoes, sauce and pickled red cabbage. This is a very traditional serving in Denmark.

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Index Terms - consumer study, cooking method, meal, pork chops, pork roast

I. INTRODUCTION

Market surveys reveal the kind of food consumers buy and eat. However, nothing is published on how the consumers cook and serve the food at home. How are pork chops cooked and what kind of accompaniment is served? This information is very valuable for the meat industry in relation to recipe development and market campaigns. Are the Danish consumers bound by tradition when eating meals with pork? The aim was to investigate how Danish consumers cook and serve meals with pork chops and pork roast in their homes.

II. MATERIALS AND METHODS

A. Selection of consumers for testing pork chops Households (n=156) corresponding to 312 consumers were recruited by an opinion-research institute. The consumers were selected with an equal distribution according to age and geographical standing. The two age groups represented 18 to 30 years and 31 to 60 years, respectively. The two geographical standings were Holstebro (province city) and Roskilde (the capital Copenhagen suburb). There was no criterion according to gender as the test was carried out as an in-home test with at least two consumers in each family. B. Selecting consumers for testing pork roast The consumers were recruited from the surrounding area of Roskilde (the capital Copenhagen suburb). It was aimed to have an equal distribution according to age below and above 30 years for consumers responsible for cooking. Households (n= 26) corresponding to 160 consumers participated in the test. C.

Consumer guidelines The consumers received either pork chops or pork loin roast provided by the Danish Meat Research Institute and were told to cook and serve the meat with accompaniment in the way they used to do. No other guidelines were given. D. Questionnaire A questionnaire was provided to all households in order to receive detailed information on the cooking and the composition of the meals. The questionnaire included questions concerning how the chops were cooked e.g. in a pan or oven and if they were underdone, medium or well done after cooking. In addition, the accompaniment of the meat was described. The same questions were asked regarding the pork roast.

III. RESULTS AND DISCUSSION

The majority of the consumers fried the chops in a pan corresponding to 87% of the consumers, even though many of the consumers had a preference for oven preparation when they were asked about their favourite meal with pork. The chops were fried to the point of well done by 57% of the consumers, medium by 33% and underdone by 1%. The meal composition was divided into three: 1) meat, 2) starchy food and 3) vegetables. Potatoes were the

most popular starchy food chosen by 63% of the consumers. Chops with rice were served by 21% while only 3% served pasta (Table 1).

Table 1
Type of starchy foods served together with pork chops

	% of consumers serving
Potatoes	63
Rice	21
Pasta	3
Other	13

There were large variations in the choice of vegetables (Table 2).

Table 2
Type of vegetables served together with pork chops

	% of consumers serving
Mixed vegetables	21
Carrot	21
Broccoli	7
Onion	7
Cauliflower	6
Leek	5

Mixed vegetables and carrots were most popular, both served by 21% of the consumers. Cauliflower, broccoli, onions and leeks were served by 5 to 7% of the consumers. Other vegetables served by less than 5% of the consumers were cucumbers, mushrooms, garlic, cabbage, red cabbage, parsley, apples, corn and peas. There was no geographical difference in the cooking method neither in the choice of accompaniment. However, 58% of the consumers in the province city, Holstebro, served a kind of sauce with the chops compared with only 36% of the consumers in Roskilde, the Copenhagen main capital suburb (Table 3).

Table 3
% of consumers serving pork chops with and without sauce in Holstebro and Roskilde

	With sauce	Without sauce
Holstebro	58	42
Roskilde	36	64

Regarding pork roast, 25 out of 26 families cooked the roast in an oven. The last family used a barbecue. The majority prepared the roast to the point of well done. Nearly all families, except one, served potatoes and sauce with the roast and 22 out of 26 families also served pickled red cabbage, which is a very traditional way of serving pork roast in Denmark. Only one family served green

salad. No geographical difference was found. The serving of pork chops did not seem as bound by tradition as serving of the roast. Even though the majority of the consumers prepared the chops in a pan, many of the consumers said they preferred chops cooked in an oven. However, the consumers in this study - also taking part in another large experiment - had to cook chops from three different types of pigs at the same time [1] and perhaps they found it easier to keep the chops separated when frying in a pan. Even though several investigations have focused on optimum cooking conditions for meat [2] and consumers generally are recommended to cook the meat in a gentle way, the consumers were quite identical in cooking until the meat was well done. For accompaniment potatoes were preferred, but also rice and different vegetables were served. Interestingly, there was a geographical difference in preference for sauce. This study indicates a higher frequency of serving sauce in the county side compared with a big urban area. In addition, a Danish consumer study with focus on visually presented convenience meals confirmed this difference in preference for meals with sauce depending on residence, as consumers from the country side had a higher preference for sauce compared with consumers in big urban areas [3]. The serving of pork roast was on the other hand very traditional, maybe because pork roast is often associated with the Christmas dinner and might even be classified as a typical Danish national dish. The results from this study can be used for consumer guidance containing information about cooking method and time together with recipe development and market campaigns.

IV.CONCLUSION

A consumer study was carried out on pork chops and pork loin roast and included consumers from two parts of Denmark (metropolitan area and the provinces). The consumers were recruited by an opinion-research institute, 312 consumers for pork chops and 160 consumers for pork roast. They received either pork chops or pork loin roast to cook and evaluate at home. The consumers were asked how the meat was cooked and served. In general, the consumers cooked the meat until it was well-done. The majority served potatoes or rice with the chops. More than half of the consumers also served vegetables. Consumers in the province city (Holstebro) served more frequently sauce with pork chops compared with consumers from the main capital suburb (Roskilde). The cooking and

serving of pork roast was very traditional, as nearly all the consumers prepared the roast in an oven and served it with potatoes, sauce and pickled red cabbage. Apart from serving sauce to pork chops, no geographical difference was found.

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