Extended Abstract

	What role do attitudes, information and taste play
Paper/Poster Title	in consumer preferences and willingness to pay for
	local/domestic alternatives for exotic superfoods?

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Abstract 200	0 words max
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Superfoods are a recent health-oriented food trend, especially among younger consumers. The most well-known superfoods such as quinoa or goji berries can be considered as exotic foods, at least for the European market. Thereby contradicting another food trend – a movement towards regional or local foods. As little is known about how consumers evaluate this trade-off while consuming superfoods, we investigate i) consumers' preferences and willingness to pay (WTP) for domestic and exotic superfood ingredients; and ii) factors determining a higher WTP for domestic superfood alternatives. To this end, we conduct a three-step experimental (second price Vickrey) auction of fruit smoothies with exotic and domestic superfood ingredients. 116 individuals participated in the experiment, which included an information treatment, and tastings and a sensory evaluation. In general, sampled consumers perceived superfoods as a healthy, yet expensive food trend potentially harmful to the environment. Participants were eager to sample the exotic smoothie, but attributed more positive health benefits and a better taste to the domestic smoothie. Across regression models, we consistently find a positive evaluation of the domestic smoothie, which was re-enforced by providing information about the fruits origin. In conclusion, framing vitamin-rich domestic fruits as superfood alternatives could further support their consumption.

Keywords	willingness to pay, experimental auction, food origin, food neophobia, taste and sensory evaluation		
JEL Code	Agricultural Markets and Marketing; Cooperatives; Agribusiness, Q13		
Introduction		100 – 250 words	

Superfoods have been a recent trend in food markets, being omnipresent in newspapers, blogs and social media. At the same time, scientific evidence on consumers' perception and acceptance on the topic is relatively scarce. While the demand of and interest in these foods can be primarily explained by the trend towards healthy eating, the most well-known superfoods such as quinoa or goji berries can be considered as exotic foods, at least for the European market. This might contradict another very prominent trend in recent years, namely the trend towards regional and local foods. This resulted in an increasing discussion of so-called local or regional superfoods. However, systematic scientific evidence on how consumers might evaluate this potential trade-off while consuming superfoods has not been investigated



so far. Hence, the aim of the study is to provide empirical evidence on how different types of superfoods are perceived and how these perceptions affect participants' acceptance and willingness to pay (WTP).

Methodology 100 – 250 words

An experimental auction combined with sensory tastings was conducted in Germany in December 2019 with 116 participants (students and non-students). The products chosen as stimuli for the study were two fruit smoothies with exotic and domestic superfood ingredients. The "exotic smoothie" contained pink dragon fruit and soursop (guanabana); while the "domestic smoothie" featured a blend of different berries (raspberries, blueberries, blackberries, red and black currents) common in Europe. A manipulation check verified that the respondents who participated in the experiment indeed perceived the chosen products as exotic or domestic food products.

We conducted a second price Vickrey auction, for which we randomly assigned the participants of a session into anonymous groups of four bidders. After a practice round, three auctions were conducted. The objective was to assess how consumer beliefs and psychographic characteristics shape WTP in Auction I (visual presentation of the products only), and how the experimental treatments in Auctions II (pictures of the fruits and information about their origin), and Auction III (tasting) affect WTP for domestic and exotic superfoods. In each auction, participants simultaneously submitted sealed-bids for both smoothies. The binding auction and smoothie were drawn in the final phase of the experiment, and the winner of each group of bidders determined.

Participants also completed a questionnaire, in which a special focus was placed on their superfood perceptions, their general health interest, their attitudes towards local/domestic food, and their food neophobia tendencies, which have been shown to be an important driver of acceptance of foods in general.

Results 100 – 250 words

Findings suggest that, in general, sampled consumers perceive superfoods as a healthy, yet expensive, food trend. Moreover, they associate it strongly with exotic foods and perceive it as rather harmful to the environment. For the two smoothies specifically, participants were more eager to sample the exotic smoothie, but agreed more strongly with the statements endorsing the positive health benefits and good taste of the domestic smoothie.

An initial analysis of the auction results shows: For Auction I (visual only), the difference between the aggregate bids for the domestic and exotic smoothie is not statistically significant. Results for Auctions II (information) and III (tasting) suggest that valuations changed after the information provision - sample mean WTP increased for the domestic smoothie, resulting in a statistically significant difference between the aggregate bids for the domestic and exotic smoothie.

A formal analysis of the auction results using regression models, and considering first differences between auction rounds, suggests for example a stronger positive effect of the information treatment on the WTP for the domestic smoothie for consumers with stronger attitudes towards regional food $(WTP_{domestic}^{Auction\ II} - WTP_{domestic}^{Auction\ I})$. Finally, assessing the determinants for consumer's higher WTP for domestic smoothies $(WTP_{domestic}^{Auction\ I,II,III} - WTP_{exotic}^{Auction\ I,II,III})$, findings for Auctions I and II suggest that price



premiums are driven by food neophobia, and favourable taste and nutrient perceptions. In addition, Auction III results suggest that differences in WTP between domestic and exotic smoothies after the tasting result from differences in the sensory valuation, but were mediated by the health interest.

Discussion and Conclusion

100 - 250 words

We conduct a three-step experimental auction of two fruit smoothies to investigate i) consumers' preferences and WTP for domestic and exotic superfood ingredients; and ii) factors determining a higher WTP for domestic superfood alternatives.

As expected, we find that providing information on the fruits origin had a significant positive effect on the WTP for the domestic smoothie. This effect was stronger for consumers with more positive associations for regional foods. Thus, while exotic ingredients may easier catch consumer's attention, our findings reveal more favourable taste and nutrient perceptions for domestic superfood ingredients.

The study provides a first exploratory insight into the preferences for domestic and exotic superfood ingredients. It is, however, not without limitations. The sample is not representative, as it is relatively younger and more highly educated than the German population. Nevertheless, the sample represents a typical consumer group for superfoods and consumers who are concerned about trading-off health versus environmental aspects. Since exotic superfoods can have a negative connotation for some consumers, framing vitamin-rich domestic fruits as superfood alternatives could further support their consumption.

