

## "Is organic really organic? " – Why consumers do (not) trust organic food and what they expect from the organic sector. - Results of focus groups -

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### ABSTRACT

This paper addresses consumer trust in organic food in order to find out which aspects increase and decrease trust and which trust expectations consumers have. The aim is to strengthen consumer trust on the basis of the findings and to develop trust-building measures. To this end, ten focus groups with German consumers were conducted online in February 2021 and evaluated using content analysis. The results show that there is a predominant lack of trust in organic food. This is based in particular on the fact that organic production is often doubted and there are from the consumer's point of view too many organic labels. This can be attributed not only to a lack of knowledge on the part of consumers, but also to a lack of transparency within the organic sector and in relation to organic food. Results from the consumer's point of view show that the possibility of control, information and transparency are relevant for trust in organic food and the development of knowledge about organic food can positively influence this trust.

**Keywords:** *Trust; consumer expectations; organic food; focus groups.*

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## 1 Introduction and background

After the USA, Germany is the country with the second largest market for organic food worldwide and thus the country with the largest market in Europe (Schlatter et al., 2020). Even though sales of organic food in Germany continue to rise (Statista, 2021), Germany ranks only seventh in terms of per capita consumption in Europe (Schlatter et al., 2020).

Several reasons for this relatively low per capita consumption are discussed in literature: Most of all higher prices are discussed but also a lack of information, a lack of transparency or a lack of trust in organic food (cf. e.g. Terlau and Hirsch, 2015).

Trust in organic food is a decisive factor for consumers to make a positive purchase decision in favour of this kind of food (e.g. Ayyub et al., 2018). However, they are often prevented from trusting by knowing too little about the meaning of the various organic labels, doubts about organic production, doubts about the labelling or certification or a lack of knowledge (for a detailed overview see Kushwah et al., 2019). In a previous study, Di Guida et al. (2021) also pointed out that especially the knowledge deficit of consumers is associated with their trust deficit and therefore transparent information is necessary for increasing trust. Furthermore, "inconsistent standards, monitoring, and assessment practices" (Nuttavuthisit and Thøgersen, 2017) have a negative impact on trust.

In contrast, especially well-known producers and traders are trusted (cf. Profeta and Cicek, 2021), which can be justified by the personal contact to them, but also by a certain possibility of control – as far as consumers are in spatial proximity to them and thus can visit their farms (cf. also Di Guida et al., 2021). In terms of awareness of and trust in the various labels, Profeta and Cicek (2021) showed that the label that is best known and most trusted by 58 % of German consumers is the German organic label. The EU organic logo, on the other hand, is trusted by just 43 % despite identical claims (ibid.).

However, since organic foods are products that are particularly characterized by credence qualities – i.e., those whose properties cannot be assessed by consumers either before or after purchase (e.g., contaminant content; Darby and Karni, 1973; von Meyer-Höfer and Spiller, 2016, among others) – they must be trusted. In this paper, trust is understood as the "subjective conviction [...] of being able to place oneself in the hands of a person or institution without being exposed to the risk of harm" (Schweer and Ruholl, 2020).

Another reason discussed for the low purchase rates is lack of knowledge which leads to a lack of trust. Already Simmel (1908) stated that "the fully knowing [...] does not [need] to trust, the fully not knowing [...] reasonably [cannot] even trust" (p. 346). Fathaa and Ayoubi (2021), who conducted a study in Lebanon, also suggest that low organic consumption is associated with low consumer knowledge. The same, as well as a general lack of knowledge, was also identified by Mesías Díaz et al. (2012). Since, in addition to trust, the level of consumers' knowledge also influences their willingness to buy organic food, further information is necessary (Rodríguez-Bermúdez et al., 2019).

The research project investigates how trust in organic food is formed from the trader's and the consumer's point of view, and how measures for building trust as well as their content should be designed. This paper focuses only on the consumer's point of view. Accordingly, the reasons for buying organic food are also relevant. Among other things, Zander et al. (2018) name the following as motives for buying organic foods: health, taste, less residues (egoistic motives), environmental protection, animal welfare or naturalness (altruistic motives).

As one stage in this project, online focus groups with German consumers were conducted in February 2021 to investigate, among other things, the reasons for and against buying organic food, which aspects increase and decrease trust and what trust expectations consumers have of organic food.

Based on the foregoing, this article will explore the following research questions:

- RQ 1: For what reasons are organic foods purchased and for what reasons are they not?
- RQ 2: Which aspects increase trust, which decrease trust and which trust expectations do consumers have for organic food?
- RQ 3: Is information important for consumers and if so what kind of information do they want?

Findings are relevant for the organic sector in order to react adequately to consumers' needs and expectations and to increase their trust. Therefore, it is shown how the results can be used by the organic sector and how information can be presented in order to increase consumer trust.

## 2 Methodology and sampling

Ten guided focus groups were conducted in February 2021. These took place in an online format due to the Covid 19 pandemic. Focus groups are conversations between several people on a given topic with the aim of gathering information. As in the present case, they can be used to explore opinions and attitudes and – as in the case of the research project – serve as a preparatory procedure for standardized survey instruments (Lamnek, 2010). This method was chosen in order to capture the participants' ideas, attitudes and opinions and to explore the subject area before conducting a standardized survey (that is not a topic in this paper).

The focus groups were conducted with six participants each, five of them with participants from Duisburg (urban area) and five with participants from Göttingen (rural area)<sup>1</sup>. The participants were recruited in advance by a market research company, which ensured the fulfilment of certain quotas with regard to socio-demographic characteristics (age: 20-70 years, gender: 50% female/male each) as well as requirements resulting from the research subject (purchase intensity of organic food: approx. 33% intensive, occasional, non-buyers each, knowledge about organic food: approx. 33% of each good, medium, little knowledge). The participants had no agricultural background, they were not aware of the topic in advance and they were not vegetarians/vegans. Due to the heterogeneity of the groups in terms of age, gender, consumption intensity of and knowledge about organic food, a broad spectrum of opinions was to be represented (Christoph-Schulz et al., 2018). The focus groups, which lasted on average about 90 minutes, were recorded by audio and video. The transcripts, which were prepared by a transcription service, were subsequently evaluated by means of qualitative content analysis with the aid of MAXQDA software. The focus of the evaluation was on the content-thematic results, not on group dynamics (Lamnek, 2010). For this purpose, a deductive-inductive category system was created and the participants' statements were classified into this. The deductively created categories were based both on literature and on the topic areas of the discussion guide. The discussion guide was tested in advance by two pretests. It was designed on the basis of literature and also on the basis of the results of individual interviews conducted in advance with random consumers from the above-mentioned cities. Each discussion started with the question of what is important to the discussants when purchasing food. This was followed by the topics of perception, prior knowledge and purchase criteria for organic fruit/vegetables and organic meat/sausage. Subsequently, trust in organic food, specifically trust-increasing and trust-reducing aspects were discussed and statements derived from interviews conducted in advance of the focus groups (e.g., "If it says organic, I trust that it's true, that it really was produced that way, and don't question it for now"). During the course of each focus group, the moderators gave an input presentation of about three minutes. The input was given at about halftime during the discussion and it was intended to provide the participants with a basic knowledge of organically produced food. The aim was to capture any changes in perception and trust afterwards. The main categories relevant for this paper are the following: Reasons for purchase, barriers to purchase, trust-reducing and trust-increasing aspects and trust expectation.

It can be assumed that a theoretical saturation (Glaser and Strauss, 1967) has been reached, since the statements of the participants of the different groups are very similar, so that the execution of further focus groups would not have led to any further new results.

## 3 Results

### 3.1 Reasons and barriers for buying organic food

The focus groups began with the question of which factors are generally important to the discussants when buying food. In particular, price, quality, regionality, freshness and taste were mentioned. Only a very small part of the discussants (approx. 5 %) actively mentioned organic as an important factor when buying food, whereby it was said again that they only partially pay attention to this. The majority of the participants, however, do not buy organic food and if they do, then rather "by chance" or if it is cheaper compared to conventional food.

#### 3.1.1 Reasons to purchase

The main reason given by buyers for purchasing organic products is the absence of antibiotics in animal husbandry and the absence of chemical-synthetic pesticides in plant cultivation. This is particularly due to health reasons, as consumers do not want to consume these substances or do not want their children to consume them because they fear negative effects on their bodies. The protection of the environment is mentioned only very rarely. The better taste of organic food compared to conventional food is mentioned as another reason for purchase, as is the

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<sup>1</sup> When describing the results of the focus groups, the corresponding references are abbreviated according to location. Here G stands for Göttingen and D for Duisburg. The following number refers to the number of the focus group and the following letter to the sex of the participants (m=male, f=female).

better animal husbandry. Some of the participants also stated that they buy organic food when it is on offer, so that price savings are the main reason.

### 3.1.2 Barriers to purchase

The most frequently cited barrier to purchase was the higher price of organic food. When shopping, consumers pay attention to the price and therefore tend to buy conventional products. Even if they would like to buy organic food, the price is the limiting factor. In addition, it is often not clear to the consumers "where the price difference comes from" (G4, m). One interviewee said that he would be willing to pay a higher price if he was "really sure that everything is done correctly" (D2, m).

Thus, the willingness to spend more money on organic food compared to conventional food is influenced on the one hand by the uncertainty about compliance with the guidelines, but on the other hand also by doubts about whether the food declared as organic has actually been produced organically (for more details, see section "Trust-reducing aspects"). Another purchase barrier is that regionality is often more important than organic: "It doesn't have to be labelled as organic, but it has to be regional" (G3, f); "You don't necessarily get the organic label on it, but [...] I can look at the production, I can partly [...] look at the pig, [...] so that's organic with us" (G3, f). In case of regional food, therefore, not only the environmental aspects are important, which mean "short distances" for the participants. The possibility to control and to be able to see the production of the food itself is also associated with regional food. The quotation also shows another point that was frequently mentioned: A part of the discussants associates with "organic" that this food should not have travelled long distances. Especially food that is imported from far away countries does not fulfil their definition of "organic", because "if it comes from overseas, it is not organic anymore" (G4, f). To a large extent, participants in the discussions prefer to buy (regional) food, of which the producer is known to them, "than if, i.e. apples come from Chile which have flown halfway around the world, but have an organic label" (G4, f). This is also shown by the fact that organic and regional are often confused: "For example, I buy my meat and sausage at the butcher. And there [...] [I] simply assume that it is organic, or from the region" (D1, m). The discussants have "a good feeling" about regional food (G10, m). This can also be explained by the perceived high standards in Germany, because it is more trustworthy "to buy things that are regional. I also think that in Germany we have rather stricter guidelines than in other countries and that one can probably have a little bit more trust" (G4, f). Furthermore, organic food is not described as better than conventional food which is another barrier to purchase. Some discussants mentioned that organic food does not taste different or better than conventional food (G4, m), has the same impact on the environment as conventional food or is not "better" regarding the use of pesticides (G3, m; G8, f; G8, m, G8, f). However, this also reflects the fact that many consumers are not aware of the differences between organic and conventional food: "[I can't] actually imagine [...] what the big difference is. Except that perhaps less produce is sprayed. But [...] a banana and an organic banana taste the same. I just can't imagine what the difference is" (D1, m).

## 3.2 Trust

### 3.2.1 Trust-reducing aspects

Even before the question "Do you have trust in organic food?" was explicitly asked, trust-reducing aspects were widely mentioned in each group. Participants who stated they had trust were almost non-existent. Overall, little trust can be determined among the participants.

#### *Doubts about organic production*

This aspect was most frequently mentioned as the reason for little or no trust. Consumers are uncertain whether the guidelines for the production of organic food are always adhered to. For some of them there is a lack of "proof that it is as it is supposed to be" (D1, m). One participant also said that it is "proven that just because it says organic on the label, it doesn't mean it's organic inside" (D9, m). Another factor that reduces trust is the feeling that there cannot be as much organic food as is sold on the market. This is also reflected in the fact that organic food stores/supermarkets and direct marketers or butchers are trusted more than supermarkets. In the shopping places mentioned first, consumers believe and trust that the food sold there is organic due to their specialization in organic food. The situation is similar with direct marketers and also butchers. In the case of supermarkets and discounters, the situation is different: It is said quite often that there cannot be as much organic as is sold in these shopping venues: "[...] everything is always available, and even if it says 'organic' I do not think that it is always organic" (G3, f). Another discussant mentioned that the organic food "in supermarkets being mass-produced is so-called Organic Light" (D9, f). In addition, the "big chains" are more likely to rip off consumers because of their power and influence on society, as one participant states (cf. D9, m). In the case of direct marketers and butchers trust is also strengthened by personal contact. This is not the case in supermarkets and discounters. Doubts about organic production from the consumer's point of view are also intensified by the fact that there are too many different labels.

### *Too many labels and lack of clarity about their meaning*

On the one hand, the multitude of labels confuses consumers, and on the other hand, it is usually not clear which guidelines the labels cover and which labels are trustworthy. "So, there are many organic labels nowadays. Whereby, I have not dealt with each label and with the different guidelines. But [...] there are just so many, one does not know whether and what is really correct" (G4, m). In order to have trust in the various organic labels, consumers would have to deal with the respective guidelines and specifications. But the high number of labels alone reduces the trust in organic products in general. The discussants expressed the wish for a reduction of the number of labels and information about their meaning or about what the respective label stands for. Additionally, the package of a product should give product related information, e.g. about the origin or the animal husbandry. "Then I could have more trust. Then I would definitely buy more organic food" (D5, f).

Labels are supposed to create transparency, but they do not seem to contribute to it: "These days organic is written on everything, but it's not really organic. Yes, you really have to look into the background. Has the animal really been raised organically? Did it get organic feed? Was it really put out to pasture or not? For me as an end user, this is sometimes not really comprehensible at all" (D9, m). Labels actually stand for compliance with the guidelines, but that these are actually adhered to when a food bears a label is doubted by the discussants and they continue to see their own need for control.

Another aspect is that organic trademarks are confused with organic labels: "Every supermarket somehow has its own organic label. There is also the question, how much one can trust the organic label of a discounter or a supermarket [...]" (G4, f). This shows that not only the number of "correct" organic labels is confusing, but also that different supermarkets and discounters have their own designations for the respective organic brands. These contribute to even greater confusion on the part of consumers, since they are mistaken for labels.

Especially the EU organic label is less trusted: "An organic label from the EU, for example, where I think it is rather the real deal – it then goes in the direction of green washing, where I myself cannot imagine that the guidelines are as strict as they could actually be. And I have just seen in a magazine, for example, a few labels that you can trust, such as Bioland, Naturland and Demeter" (G4, f; cf. section "Trust in farmers' associations").

### *Other aspects that reduce trust*

Other aspects that reduce trust – but are mentioned less frequently than those described above – are as follows:

*(Plastic) packaging:* From an environmental point of view, consumers do not understand why organic food in particular is packaged in plastic. For them, the idea behind organic is often that it is good for the environment. Plastic, on the other hand, stands for the opposite. In this respect, organic food packaged in plastic combines two opposing aspects, which sometimes then leads to a purchase decision in favour of conventional food: "Sometimes there are organic products that are sealed in plastic which is totally unnecessary. Where I then also think to myself, that somehow this is a double standard when you actually buy organic but then there is a lot of plastic next to it. When you can, for example, buy another cucumber that is not organic, which has no plastic packaging" (G4, f). From the consumer's point of view, the trust in organic food is also reduced by the type of packaging (cf. D2, f; G4, m) or even increased if there is no discrepancy between intention and implementation: "The [...] organic tomatoes in a cardboard box that you can buy open. [...] That [is] for me completely successful. It says organic on it, they are not packed in plastic. Next to it are organic tomatoes wrapped in plastic. And that then ruins the trust for me that I have in the product. And then, of course, I decide to buy the organic tomatoes, which are really suitably packaged" (G4, m).

*Food scandals/recalls:* Food scandals, recalls and negative media reports are mentioned as further reasons for a lack of trust. On the one hand, this directly concerns organic food, such as "organic eggs [that] were not organic eggs at all" (D1, m) mentioned by one participant, but also scandals that do not relate to the organic sector such as "glycol in wine [...] or rotten meat in goulash or horse lasagne" (G7, m). These (conventional) food scandals also have a negative effect on organic food (cf. G3, f).

*Imported organic food:* This point is closely linked to (higher) trust in regional food. Imported food tends to be less trusted and it is doubted that organic food produced or grown abroad also meets the specified guidelines. In addition, it is often contradictory for consumers that organic food is (allowed to be) transported long distances until it finally reaches the end consumer: "When I'm in the supermarket and I see the organic apples from Chile, I'd rather buy the non-organic apples from Germany. It's absurd that these organic apples travel tens of thousands of kilometres, then I take the non-organic stuff" (D5, f). This is especially true for foods that are also grown in Germany such as apples. Their understanding of "organic" is a holistic one, which also includes the ecological footprint in the sense of "short distances".

Also wrong and partly romanticized ideas about organic production can be problematic with regard to trust. In relation to organic fruit/vegetable production, the perceptions are rather realistic, but the participants do not

have much knowledge about the production process. In particular, it was often mentioned that the discussants assume that no or at least less (chemical-synthetic) pesticides are used in the production process and that fertilizer is used to a lesser extent or that it is more "natural". In addition, the renunciation of genetic engineering and monocultures were mentioned sporadically. Sometimes unrealistic ideas are presented, which are expressed by the fact that the organic cultivation is described as "more natural". By this they mean partly that human intervention is renounced during the cultivation and e.g. during the cultivation only "products and accessories are used which also occur in nature" (D5, m). Sometimes it is also assumed that there is a "farm feeling" (D1, f) or it is hoped "that they [the organic food; author's note] are also cultivated by rather smaller companies, i.e. not only on huge plantations, but that [...] projects are also supported or small farmers who earn their money with it and their livelihood [...]" (D6, m). In the case of organic meat/sausage production, particular aspects of animal husbandry and feed were mentioned. The most frequently mentioned aspects were that the animals are fed "different" feed to conventionally kept animals and that the feed must be GMO-free and/or organically produced. Furthermore, one of the most frequently mentioned idea/thought was that the animals must not be given antibiotics or other medications. With regard to animal husbandry, it was most often said that the animals live on a meadow or at least get to be outdoors and have more space in the barn. In part, organic husbandry is seen as the opposite of "factory farming". It is assumed that this does not happen in organic husbandry and that the animals sometimes "live quite happily" (D5, m). The thought that an organic farm is an "ideal world" (G7, m), a "farm atmosphere [...] how it used to be" (D1, f) seems to prevail.

However, a few participants also stated that what is described is more a matter of wishful thinking than of fact: "I have great doubts that what we imagine so idealistically or what I imagine idealistically, namely the chickens clucking around in the meadow, the pig wallowing outside in the mud, the cow that can grow up with its mother, that that's exactly how it works, yes, or that it exists, and that meat then is produced differently. This is how I would imagine it always [...] and wish for" (D6, m).

### 3.2.2 Trust-increasing aspects

#### *Trust in known producers/traders*

Trust in known producers/traders is not (only) limited to organic food, but rather a global issue. Although they are also trusted more with regard to organic food, trust in them is generally high. On the one hand, this can be explained by the greater transparency (compared to supermarkets or discounters). Consumers can ask questions and sometimes even directly trace the production or origin of the food (if, for example, the producer is located near the consumer). All this is "worth more than having an organic label stuck on it" (G4, f). The purchase of (organic) food directly from the producer also conveys a good feeling (cf. e.g. D6, m), because there the consumers are convinced "that it is actually organic" (D6, f). Furthermore, shopping in the farm store or at the weekly market is characterized by personal contact which also increases trust.

#### *Trust in farmers' associations*

The labels of farmers' associations (e.g. Demeter, Bioland) are perceived by consumers as more trustworthy than, for example, the German or the EU organic label. The latter has only "very low minimum requirements" (G4, f). The farmers' association "Demeter" is the one most frequently mentioned by the participants. It is considered very trustworthy and would be strictly controlled. Some Participants mentioned that it is "one of the strictest labels [...] which exists in Germany" (D5, f) and the "highest level of organic production" (D6, m).

#### *Transparency*

For consumers, this point includes the traceability of the origin of the food, how the food was produced, and how the animals were kept. They state that transparency can help to increase trust.

In addition, various other reasons for trust were mentioned, such as trust in German standards, since "in Germany one often has stricter guidelines than in other countries" (G4, f) or purchasing in organic food stores or organic supermarkets.

### 3.2.3 Trust expectations

The question "What is crucial for you to have trust?" was asked to get information on trust expectations. However, trust expectations are already reflected in the aspects mentioned in the chapter about reduced trust: From the consumer's point of view, a uniform label, the possibility of control, and transparency with regard to production/manufacture are particularly relevant for trust. As described in the section "Trust-reducing aspects", from the consumer's point of view there are too many labels and their meanings are often unclear. Therefore, the *desire for one label or at least fewer labels* was often expressed, because "this uniformity [...] would simply create a greater trust" (D5, f). The "criteria that leads to the award of these labels must be so clear [...] and so little influenceable [...] and also transparent [...] [that] I can really trust them" (D6, m). And a desire for a state-

regulated, meaningful label is also raised/mentioned (cf. D1, m; D1, f). The *desire for greater transparency* includes, among other things, that the discussants would like to know what the organic labels mean, what requirements must be met to obtain a label, where the product comes from or how the animals were kept. The desire for greater transparency goes hand in hand with the *desire for control options*. The discussants stated that they would have trust if they had the possibility to check the previously mentioned aspects. The discussants themselves named different possibilities how they could envisage this possibility of control. They stated that these control possibilities could be created via "open days", documentation websites or QR codes. In the later course of the focus groups, QR codes were mentioned to the participants by the moderators as a possibility to receive information. This prospect was then discussed. This possibility was also evaluated positively by the vast majority, since it is a fast, efficient way to receive information and, to a certain extent, obtain the desired possibility of control.

## 4 Discussion

In relation to the research questions posed at the beginning the following points emerged:

**RQ1 "For what reasons are organic foods purchased and for what reasons are they not?":** Primarily egoistic motives can be found such as taste or the avoidance of chemical-synthetic pesticides and antibiotics out of concern for negative health effects. Altruistic purchase motives such as better animal husbandry in organic meat production for example can be found less. The purchase motives correspond to those of Zander et al. (2018).

The main barriers for not buying organic are higher prices, uncertainty about compliance with the guidelines, but also doubts about whether the food declared as organic has actually been produced organically plus a certain lack of knowledge.

**RQ 2 "Which aspects increase trust, which reduce trust, and which trust expectations do consumers have for organic food?":** Trust-reducing aspects go together with the purchase barriers, but are also supplemented by a lack of transparency, the excessive number of different labels, and too little information about them. Similar findings are made by Terlau and Hirsch (2015), who also identified a lack of trust, a lack of information and a lack of transparency, for example, as barriers to purchasing organic food. Especially the fact that consumers often mention their doubts about the actual organic production shows that they doubt the credence qualities (cf. Darby and Karni, 1973) of organic food. As already shown in other studies (e.g. Profeta and Cicek, 2021; Di Guida et al., 2021), in the context of this study it was also ascertained that especially well-known producers and traders are trusted. This can be explained by geographical proximity and the possibility of personal contact. This also leads to greater transparency which at the same time increases trust. Schweer and Ruholl (2020) also note the transparency desired by consumers with regard to production conditions and certification. The trust in the farmers' associations is mostly justified by the fact that consumers are familiar with them – especially Demeter – and that they are also aware that they have strict guidelines. They enjoy a high level of faith as consumers trust that these guidelines will be adhered to and that compliance will be monitored. The federal organic labels (German organic label and EU organic logo) are not trusted in the same way – this differs from Profeta and Cicek (2021). The main problems with the EU organic label are that its visual design is not self-explanatory and that there was no information campaign when it was launched (Zander, 14.12.2021).

It is therefore hardly surprising that one of the expectations of trust is the desire for a uniform label which should be credible and trustworthy. The trust expectations concerning the desire for control possibilities and for transparent production are based on the trust-reducing aspect of doubts about organic production. The desire for control possibilities is above all understandable with non-existing or weak trust, since "weak trust [...] in the controlled framework [thrives] better. Deep trust needs control only selectively" (Schulte-Austum, 2019). Moreover, the findings on consumers' motives for buying organic food should be used to highlight these as special features of organic food and also to show that organic food can at least partially satisfy consumers' general needs when buying food (price, quality, regionality, freshness and taste). Because the more they feel that organic food does this, the more they trust the producers (Ladwein and Sánchez Romero, 2021).

**RQ 3 "Is information important for consumers and if so what kind of information do they want?":** A large part of the discussants stated that the most important information is the indication of the origin of the food. Now it is questionable for what reasons this is relevant for them. On the one hand, it could refer to German origin, i.e. that food must come from Germany to be trustworthy. This would be consistent with trust in regional food. On the other hand, the origin of food is usually indicated on the labels of most food products anyway. This raises the question of whether many consumers are not aware of this or whether they only express their desire for information on origin in order to provide a justification – if not an excuse – for not buying organic food. Furthermore, it would possibly make sense from the consumer's point of view to put the indication of origin on all food products – without exceptions (regulations in this regard can be found in the EU Regulation No 1169/2011).

Of course, this again must be considered carefully as consumers then probably justify a potential non-purchase with the fact that the food is possibly imported and that they want regional food instead.

One challenge in trusting organic food is that consumers have misconceptions about what "organic" means. They often think that these foods should come from their region or at least not be imported.

In case of imported organic food, the transport is often mentioned. For the discussants, this contradicts their definition of "organic". It can be assumed that consumers think that imported food would have more environmentally harmful effects than German food due to the transport. Here, too, it must be stated that they are subject to a misconception or are misinformed. For example, at certain times of the year, stored apples from Germany have just as "negative" or even a more negative effect on the environment than imported apples.

Again, a knowledge deficit can be identified here. In addition, they sometimes have "storybook ideas" and if they discover that these are wrong, their trust will be negatively affected. In relation to this, it should be noted that, in general, misconceptions about organic production often prevail. It became very apparent that misconceptions particularly regarding organic animal husbandry can often be found. Consumers regularly assume that organic animals may not receive any antibiotics or may not be kept in factory farms (cf. also Christoph-Schulz et al., 2015). There seems to be an urgent need for educational work. However, this must be considered carefully as this could, of course, have the consequence that hitherto trusting and organic-buying consumers no longer buy organic food due to this possible new knowledge/information.

Nevertheless, it is necessary to inform consumers. On the one hand, they should be provided with information about the special features of organic production and that organic food, which is labelled as such, has actually been produced organically – regardless of the origin. On the other hand, they must also be provided with information about the labels and their guidelines should be clearly communicated. Consideration should be given to the EU organic logo to meet the desire for a uniform label which already exists in the form of this one. Also Fathaa and Ayoubi (2021) stated that consumers should be informed about organic certification and distinction from traditional foods (transferred to western markets: from conventional food).

It has to be critically mentioned, however, that while information can reach many consumers, not all of them can be reached. Even by creating transparency and providing the necessary information, not all consumers will be willing to buy organic food, engage with the information or have trust in organic food.

Even more important than the sheer presentation of information, however, is to create the possibility for consumers to inform themselves. QR codes in particular are an efficient way to do this.

Referring to the underlying definition of trust, as the "subjective conviction [...] of being able to place oneself in the hands of a person or institution without being exposed to the risk of harm" (Schweer and Ruholl, 2020), it can be stated that the "risk of harm" from the consumer's point of view is to pay a – compared to conventional food – often higher price when buying organic food, without getting food that fulfils all the expected aspects. This is reflected in the fact that the credence qualities are often doubted and consumers fear that the food has not actually been produced organically.

Assuming that fully informed persons do not need to trust (Simmel, 1908), it is therefore not a matter of trust if they have full information. However, it is the case that a certain information or knowledge base must be present in order to generate trust at all. The results show that it seems to be the same with organic food, only that here the – in the sense of Simmel – "middle state between knowing and not knowing" (ibid.) still has to be reached by most consumers. Other studies, such as Rodríguez-Bermúdez et al. (2019), also come to such a conclusion with regard to consumer knowledge. Among many consumers there is so little knowledge about organic food that it becomes impossible for them to have trust in it. In this respect, the approach of imparting knowledge and providing information seems to make sense in order to help build trust and thus increase the likelihood of making a positive purchase decision for organic food.

If consumers do not know what organic means, what the characteristics of organic are, then there is no reason for them to buy organic food. One participant summarized this meaningfully, "if I go to the supermarket and there are two lemons and they look pretty much the same, then I just buy the cheaper one" (D9, f). Without knowing about organic food, the cheaper food – usually the conventional one – is bought.

## 5 Recommendations for action

The following recommendations for action can be derived from the preceding descriptions:

### *Educate consumers and create transparency:*

This includes that consumers must be informed/must have the possibility to inform themselves in a simple and easily accessible way about what the special features of organic food are and how they differ from conventional food. If this has not taken place, trust cannot be built. The latter is only the next step.

Likewise, sometimes unrealistic ideas about organic production should be explained and shown how it really works. Consumers need a realistic picture of organic production and their "romanticized" ideas should be discarded. It must be explained that organic food from "mass production" is also "real" organic food, that organic food can also be imported and does not have to come from the region. Furthermore, it should be clarified that organic food sold in supermarkets or discounters is also "real" organic food, that organic animals do not live a "picture book farm life" and that mistakes can happen and scandals can occur within the organic sector – just as in the conventional sector. It should be remembered that honesty creates trust. It causes problems if there is a discrepancy between the ideas and reality.

### *Create control possibilities for consumers:*

With regard to the frequently encountered scepticism as to whether "organic is really organic", whether the food has actually been produced in compliance with the organic guidelines, this point is important. Consumers want to be able to check this for themselves and not just rely on labels which they tend to trust less. It is also important that consumers are provided with traceability systems, for example, to find out about the origin of food or the time of previous controls. QR codes can be a good way of doing this.

### *Information about production of organic food, its controls and labels:*

Consumers should be provided with information about the production of organic food, the process of organic food controls and the meaning of the labels.

In particular, the lack of trust in labels (especially in the EU organic logo) can be decreased with the necessary efforts, because it is precisely here that this is often justified by the lack of information or the lack of knowledge about the underlying requirements and guidelines. Consideration should be given to pushing this with a nationwide campaign, because despite the long existence of the EU organic logo since 2010, consumers still do not necessarily trust it. This includes communicating that there are also guidelines behind this label, what they are and how compliance is monitored.

Many consumers are discouraged from buying organic food because of the higher price. In combination with the fact that many people do not know why these foods are more expensive, this is hardly surprising. Therefore, consumers should be informed about the reasons for the higher price and why it is justified.

Nevertheless, for some consumers, information will be of no use. No matter how much they receive or how well it is done. This can be explained by the fact that there are also consumers who simply have no preference for organic products or for whom other criteria are more important.

## 6 Conclusion

The objective of this paper was to analyse the reasons for and against buying organic food, the trust-increasing and -reducing aspects, the trust expectations and furthermore if information is relevant for consumers. It was shown that the trust-reducing aspects are the same as the purchase inhibitors. In order to encourage consumers to buy organic food, the organic industry needs to focus on the trust-reducing aspects and provide transparency and information in these areas. In particular, the focus should be on the organic labels and efforts should be made to fulfil the desire for a uniform label by communicating that this already exists in the form of the EU organic label. Furthermore, it should also be explained what requirements are behind the label. Additionally, it must be explained how organic food differs from conventional food in terms of production and how this leads to price differences.

Another focus of the organic sector should be to create control options. These can be presented, either directly in the places of purchase or online. In this context, QR codes are a useful opportunity, as they are practical and easy to use and offer the possibility of displaying diverse and target group-specific information on the websites. Only the possibility to inform oneself, to secure oneself, can lead to trust in organic food.

Even though it has been shown that information is important for consumer trust, too much information may also carry a danger.

It has already been mentioned that consumers' trust will often decrease if they discover that their ideas about organic production are incorrect. In this respect, the transfer of knowledge and information can also be accompanied by disappointment on the part of consumers. Nevertheless, it is important to provide transparent information about the reality in order to eliminate misconceptions.

The following table summarizes the most important results of this paper.

**Table 1**  
Summary of results.

Topic	Results
Reasons for buying organic food	The main reasons for buying organic food are the absence of antibiotics in animal husbandry, the absence of chemical-synthetic pesticides in plant cultivation, the protection of the environment, better taste of organic food, better animal husbandry and when it is on offer (price savings).
Barriers for buying organic food	The main barriers for buying organic food are the higher price, the uncertainty about compliance with the guidelines, doubts about whether the food declared as organic has actually been produced organically and that regionality is more important than organic.
Trust-increasing aspects	Consumers especially have trust in known producers/traders. The trust in known producers/traders is generally high, not (only) limited to organic food because for consumers there is a greater transparency, personal contact and consumers can ask questions. They also have higher trust in farmers' associations (e.g. Demeter, Bioland) because they have higher requirements than the German or the EU organic label. Transparency also increases trust. This includes the traceability of the origin of the food, how the food was produced, and how the animals were kept.
Trust-reducing aspects	The trust-reducing aspects are especially doubts about organic production (that means uncertainty whether the guidelines for the production of organic food are always adhered to), too many labels and lack of clarity about their meaning, (plastic) packaging (environmental reasons), food scandals/recalls and if organic food is imported (consumers have doubts that organic food produced abroad also meets the specified guidelines).
Trust expectations	In order to have trust in organic food consumers wish for a uniform organic label or at least fewer labels, they wish for the possibility of control (could be created via "open days", documentation websites or QR codes) and transparency with regard to production/manufacture. The trust expectations are already reflected in the trust-reducing aspects.
Recommendations for action	Consumers should be educated and transparency has to be created: Consumers must be informed and must have the possibility to inform themselves especially about the special features of organic food and how it differs from conventional food. Moreover, control possibilities for consumers should be created: Consumers want to be able to check for themselves whether the food has actually been produced in compliance with the organic guidelines or where it is from. E.g. QR codes are suitable for this. Also information about the production of organic food, its controls and labels is necessary: Consumers should be provided with information about the production of organic food, the process of organic food controls and the meaning of the labels.

One limitation of this study is that it cannot be applied generally due to the small group of participants in the focus groups and the results, therefore, cannot be transferred to the total German population. Furthermore, it is possible that some of the discussants might have made untruthful statements in order not to show that they hold opposing views (social desirability) in front of the group. This could mean, for example, that some only said that (certain) information is interesting for them or that they are interested in using QR codes but they would not actually use them. In addition, it is questionable whether the information options rated as positive in the focus groups would actually be used, since shopping is usually habitualized. On the other hand, consumers often want to complete a purchase quickly instead of spending a lot of time in a shop to inform themselves and/or to deal with different food in more detail.

In the next months, these findings will serve as the basis for a standardized Germany-wide online survey planned for 2022 which is intended to verify the results, generate others and enable further and more concrete recommendations for action to be drawn up for policymakers, retailers and the organic sector as a whole.

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## References

- Ayyub, S., Wang, X., Asif, M., Ayyub, R.M. (2018). Antecedents of Trust in Organic Foods: The Mediating Role of Food Related Personality Traits. *Sustainability*, **10** (10): 3597.
- Christoph-Schulz, I., Salamon, P., Weible, D. (2015). What is the benefit of organically-reared dairy cattle? Societal perception towards conventional and organic dairy farming. *International Journal on Food System Dynamics*, **6** (3): 139-146, DOI: <https://doi.org/10.3390/su10103597>.
- Christoph-Schulz, I., Saggau, D., Brümmer, N., Rovers, A. (2018). Die unterschiedlichen Vorstellungen deutscher BürgerInnen zur Haltung von Milchkühen und Fleischrindern. *Austrian Journal of Agricultural Economics and Rural Studies*, **27**: 103-109, DOI: 10.15203/OEGA\_27.14.
- Darby, M.R., Karni, E. (1973). Free Competition and the Optimal Amount of Fraud. *The Journal of Law and Economics*, **16** (4): 67-88, DOI: <https://doi.org/10.1086/466756>.
- Di Guida, N., Krikser, Th., Christoph-Schulz, I. (2021). Vertrauen in Bio-Lebensmittel aus der VerbraucherInnensicht. *Austrian Journal of Agricultural Economics and Rural Studies*, **30**: 55-61, DOI: 10.15203/OEGA\_30.8.
- Fathaa, L., Ayoubi, R. (2021). A revisit to the role of gender, age, subjective and objective knowledge in consumers' attitudes towards organic food. *Journal of Strategic Marketing*. DOI: 10.1080/0965254X.2021.1939405.
- Glaser, B.G., Strauss, A.L. (1967). *The Discovery of Grounded Theory. Strategies for Qualitative Research*. New Brunswick/London, USA/Great Britain, AldineTransaction.
- Kushwah, S., Dhir, A., Sagar, M., Gupta, B. (2019). Determinants of organic food consumption. A systematic literature review on motives and barriers. *Appetite*, **143** (2019): 104402, DOI: <https://doi.org/10.1016/j.appet.2019.104402>.
- Ladwein, R., Sánchez Romero, A.M. (2021). The role of trust in the relationship between consumers, producers and retailers of organic food: A sector-based approach. *Journal of Retailing and Consumer Services*, **60** (8): 102508, DOI: <https://doi.org/10.1016/j.jretconser.2021.102508>.
- Lamnek, S. (2010). *Qualitative Sozialforschung*. Weinheim/Basel, Germany/Switzerland, Beltz Verlag.
- Nuttavuthisit, K., Thøgersen, J. (2017). The Importance of Consumer Trust for the Emergence of a Market for Green Products: The Case of Organic Food. *Journal of Business Ethics*, **140** (2), 323-337, DOI: <http://doi.org/10.1007/s10551-015-2690-5>.
- Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 (2011). Online available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011R1169&qid=1641994372237> (12 January 2022).
- Rodríguez-Bermúdez, R., Miranda, M., Orjales, I., José Ginzo-Villamayor, M., Al-Soufi, W., López-Alonso, M. (2019). Consumers' perception of and attitudes towards organic food in Galicia (Northern Spain). *International Journal of Consumer Studies*, **44** (3): 206-219, DOI: <https://doi.org/10.1111/ijcs.12557>.
- Simmel, G. (1908). *Soziologie: Untersuchungen über die Formen der Vergesellschaftung*. Leipzig, Germany, Duncker & Humblot.
- Schulte-Austum, E. (2019). *Vertrauen kann jeder. Das Rezeptbuch für ein erfülltes Leben*. München, Germany, Knauer.
- Statista (2021). *Umsatz mit Bio-Lebensmitteln in Deutschland in den Jahren 2000 bis 2021*. Online available at: <https://de.statista.com/statistik/daten/studie/4109/umfrage/bio-lebensmittel-umsatz-zeitreihe/> (14 December 2021).
- Terlau, W., Hirsch, D. (2015). Sustainable Consumption and the Attitude-Behaviour-Gap Phenomenon – Causes and Measurements towards a Sustainable Development. *International Journal on Food System Dynamics*, **6** (3): 159-174, DOI: <https://doi.org/10.18461/ijfsd.v6i3.634>.
- Mesías Díaz, F.J., Martínez-Carrasco Pleite, F., Martínez Paz, J.M., Gaspar García, P. (2012). Consumer knowledge, consumption, and willingness to pay for organic tomatoes. *British Food Journal*, **114** (3), 318-334.
- Meyer-Höfer, M. von, Spiller, A. (2016). Strategien und Erfolgskriterien für Zertifizierungssysteme am Beispiel der Agrar- und Ernährungswirtschaft. In: Friedel, R. and Spindler, E. A. (eds.), *Zertifizierung als Erfolgsfaktor. Nachhaltiges Wirtschaften mit Vertrauen und Transparenz* (pp. 75-88). Wiesbaden, Germany, Springer Fachmedien.
- Profeta, A., Cicek, M. (2021). *Vertrauen der Verbraucher in Lebensmittel und den Akteuren der Lebensmittelwirtschaft*. Online available at: [https://www.li-food.de/fileadmin/user\\_upload/Vertrauensstudie\\_26\\_04\\_2021\\_final.pdf](https://www.li-food.de/fileadmin/user_upload/Vertrauensstudie_26_04_2021_final.pdf) (14 December 2021).
- Schlatter, B., Trávníček, J., Lernoud, J., Willer, H. (2020). Organic agriculture worldwide: current statistics. In: Willer, H., Schlatter, B., Trávníček, J., Kemper, L., Lernoud, J. (eds.), *The World of Organic Agriculture. Statistics and Emerging*

*Trends 2020* (pp. 31-69). Frick/Bonn, Switzerland/Germany, Research Institute of Organic Agriculture (FiBL)/IFOAM – Organics International.

Schweer, M., Ruholl, E. (2020). Vertrauen und Misstrauen als regulative Mechanismen der Akzeptanz alternativer Proteinquellen. In: Diekmann, M., Theuvsen, L., and Weinrich, R. (eds.), *Sustainability Transitions in der Lebensmittelproduktion. Alternative Proteinquellen in soziotechnischer Perspektive* (pp. 115-137). Göttingen, Deutschland, Universitätsverlag Göttingen.

Zander, K., Schleenbecker, R., Hamm, U. (2018). Consumer Behaviour in the Organic and Fair Trade Food Market in Europe. In: Parvathi, P., Grote, U., Waibel, H. (eds.), *Fair Trade and Organic Agriculture: A Winning Combination?* (pp. 51-60). Wallingford, Great Britain, CAB International.

Zander, K. (2021). *Daten und Fakten. Deutsches Bio-Siegel und EU-Bio-Logo*. Online available at: <https://www.thuenen.de/de/thema/verbraucher-und-gesellschaft/labels-logos-siegel-wie-behalten-verbraucher-den-durchblick/deutsches-bio-siegel-und-eu-bio-logo/> (14 December 2021).