The Hype of Superfoods
A Marketing Success Story to Deceive Consumers?

Master’s Thesis

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Abstract

In this research, the consumers’ perception on superfood marketing was investigated. As literature in the field of food labels and the COO effect contradicts the advertising of superfoods, the question ‘in what way does the display of the COO and the food labels affect participants’ willingness to try new foods, evaluation of the product and their intention to buy the product’ was examined. More specifically, it was predicted that scientific language use compared to basic and tasty language use will increase participants’ willingness to try new foods, evaluation of the product and their intention to buy the product. Tasty language use compared to a basic one was predicted to be assessed better by participants. Additionally, an interaction between COO and food label was predicted. Participants’ level of ethnocentrism and food neophobia were examined to see whether they influence the results. A total number of N=74 participants took part in the present study. Participants were exposed to six ads, each containing a combination of food label (basic, tasty or scientific) and COO (domestic or international). Among the results, it was found that domestic food labels were assessed more positively than international food labels. The exposure of scientific food labels led to higher purchase intentions than basic and tasty food labels, regardless of the participants’ level of ethnocentrism and food neophobia. The findings confirm the prediction that superfood advertising contradicts previous research in the field of food advertising. These new insights may be used by marketers to adopt their marketing strategies and to motivate people to consume more domestic products and fight global warming. Future research may focus on replicating the current study and further investigate whether the results may be influenced by participants’ lifestyle and concern for global warming.
1. Introduction

Over the past two decades a consumer trend to live a healthy and nutritious lifestyle has evolved (Corbo, Bevilacqua, Petrucci, Casanova & Sinigaglia, 2014). Due to busy working lives, little time for exercise, and increased awareness of the link between diet and health, consumers have started to prefer healthy food choices over convenience foods (Corbo et al., 2014). To cope with the changing environment, marketers in the food industry have to constantly adopt their marketing strategies. Thus, “smart food policies” were introduced. These policies define actions that are implemented to improve human diet (Hawkes et al., 2015). To succeed in implementing smart food policies, it is crucial to meet consumers’ food preferences (Turnwald & Crum, 2019). Indeed, past studies examined that food labels influence the food preferences of consumers (Glanz, Basil, Maibach, Goldberg & Snyder., 1998; Hawkes et al., 2015; Fernandes et al., 2016; Bleich et al., 2017; Turnwald & Crum, 2019). For example, research shows that taste is an essential aspect for consumers when purchasing food (Glanz et al., 1998; Verbeke, 2006; Turnwald & Crum, 2019).

To further explore the impact of food labelling on consumer preferences, Turnwald and Crum (2019) investigated the food preferences of students in an American university cafeteria. By changing the food label of meals in the university cafeteria from healthy descriptions, including keywords, such as fibre and nutritious, to tasty descriptions, such as crispy and delicious, vegetables were chosen more often when possessing tasty food labels compared to healthy ones. Additionally, food labelled as tasty was rated as more delicious than food labelled as healthy. Furthermore, Turnwald and Crum (2019) investigated the importance of taste, nutrition, cost, convenience, and weight control and how these factors predict eating behaviour. Taste was the most significant factor when selecting food. However, looking further into the demographics of their sample, the results showed that for participants who lived a healthy lifestyle, the importance of nutrition and weight control was more important than taste (Glanz et al., 1998). These results indicate that taste is indeed a significant predictor when it comes to the selection of food. Nonetheless, it appears that demographics, such as lifestyles, play an essential role as well.

Possibly, the intuition that unhealthy food is tastier than healthy food leads consumers to choose foods described as tasty over foods described as healthy (Raghunathan, Walker Naylor & Hoyer, 2006). When food was assessed less healthy (compared to healthy), findings by Raghunathan et al. (2006) showed that participants rated the food as tastier and more enjoyable during consumption than the food assessed as healthy. The grounded cognition theory of desire may give further explanation for the preference of tasty food descriptions over healthy food descriptions.
Papies, Best, Gelibter & Barsalou, 2017). According to this theory, neural systems in the brain are activated while a person feels, thinks, and makes experiences in specific contexts or situations; this is referred to as a ‘stream of perceptual experiences’ by the authors (Papies et al., 2017). These streams can also create actions and feelings related to eating and drinking. For example, if a person drinks a coffee before start working, he or she may feel empowered and motivated to start working. However, these neural systems cannot only be activated by someone’s action but also by observing certain behaviours or contexts. Thus, being exposed to food in advertising or food descriptions can activate existing concepts in the neural system. During that process, certain inferences are produced about the advertised food resulting in particular emotions. According to neuroimaging evidence, being exposed to attractive foods high in calories compared to neutral and low-calorie food activates areas in the brain that are connected to gustatory and reward processing (Papies et al., 2017). Thus, it may be concluded that unhealthy foods evoke more positive feelings than healthy foods. Nonetheless, the inferences evoked by the exposure of advertising can differ per person (Papies et al., 2017). A person who pays much attention to balanced nutrition, for example, evokes different inferences than a person who enjoys a proper cheeseburger more than a nutritional salad. The grounded cognition theory of desire, therefore, also demonstrates why demographics influence the perception of food labels, as found by Glanz et al. (1998).

Contrary to the theory that many people prefer unhealthy foods, with the emergence of a healthier and more nutritious lifestyle, consumers also have started to consume functional foods. Lunn (2006) describes functional foods as “foods that have health promoting-benefits and/or disease-preventing properties over and above their usual nutritional value” (p. 171). Subsequently, the term superfood, descending from the term functional foods (Lunn, 2006), was then introduced by marketers to raise more awareness of its power to positively contribute to the consumers’ future healthy self (MacGregor, Peterson & Parker, 2018). As a consequence, consumers buying superfoods feel like acquiring ‘extra insurance’ to eat and live healthy (Currl et al., 2016). Others even refer to some foods as possessing a ‘healthy halo’ due to their affiliation with superfoods, which in return has a monetary advantage for businesses (Smith, 2019). However, due to the lack of evidence for the effectiveness of superfoods, no scientific definition of the term superfood exists (Schiemer, Halloran, Jespersen & Kaukua, 2018). Nonetheless, several researchers have attempted to define superfoods. Wolfe (2012), for example, describes it as any kind of food which includes at least two or more unique features, such as vitamins, minerals or protein. The most famous attempt of definition, however, was given by Lunn (2006, p. 171); “superfood describes food that is especially
rich in phytochemicals. The idea is that by highlighting several foods that are very good sources of antioxidant micronutrients or other classes of plant bioactives, their levels in the diet can be boosted”.

By making claims about the effects of superfoods, such as better health, beauty and an anti-ageing effect, sales have drastically increased even though there is a lack of evidence regarding the health benefits of superfoods (Weitkamp & Eidsvaag, 2014; Curl, Parker, MacGregor & Perterson, 2016; MacGregor, Peterson & Parker, 2018). The sales of blueberries, for example, have doubled after marketing them as a superfood (Weitkamp & Eidsvaag, 2014). To convince consumers of the added value of including superfoods in their diet, scientific language is used in advertising and on the product itself (see Figure 1 and 2). This is referred to as ‘pseudo-science’ (MacGregor, Peterson & Parker, 2018). Pseudo-science is described as “mislead[ing], providing vague generalisations, influencing with vivid anecdotes, and lacking falsifiability” (Chaffe & Cook, 2017, p. 21). It is argued that pseudo-science results in perceived reliability and legitimacy (MacGregor et al., 2018). By reviewing a sample of Australian articles on superfood and anti-ageing, the authors found that the media plays a pedagogic role for consumers. According to the authors, media is used as a medium to transfer the ‘pseudo-science’ about superfood to consumers. Additionally, it gives advice about how to include superfoods in consumers’ daily lives in order facilitate consumers a more responsible and healthy life.

Another term to refer to the advertising approach of superfoods is ‘quasi-scientific ideology’ (Barhill, 2013). A discourse analysis of three superfood companies in the UK and the US revealed that superfoods were marketed by highlighting their perceived nutritional benefits and their ability to obviate diseases (Sikka, 2017). To underline the nutritional benefits, all three websites made use of keywords which are widely related to health, such as vital, omega fats, and fibre. These commercial strategies may affect the group formation of consumers; consumers who include superfoods in their diet are part of the in-group whereas people who do not do so, are seen as the out-group (Sikka, 2017). Therefore, other food choices than superfoods are seen as inferior to superfoods by the in-group members.
Curll et al. (2016) refer to this phenomenon as ‘food fraud’, it describes the false labelling of products to enhance economics (Spink & Moyer, 2011). By investigating the marketing strategies of the açai berry, which is supposed to have exceptional health and anti-ageing benefits, the authors explored the product labelling of the fruit. Açai berry products in Australia are often marketed using an exotic backstory claiming that, for example, the consumption of the product facilitates ‘unlocking the energy of the Amazon’ (Curll et al., 2016). Additionally, scientific claims that are not scientifically proven support these exotic backstories.

As research has shown that tasty food labelled products are chosen over healthy labelled products and are perceived as tastier (Glanz et al, 1998; Raghunathan et al., 2006; Pphies et al., 2017; Turnwald & Crum, 2019), it can be concluded that the advertising of superfoods contradicts research in the field of food labelling. Even though multiple studies have revealed that tasty food labelling compared to healthy labelling enhances the consumption of healthy food (Glanz et al., 1998; Grabenhorst, Schulte, Maderwald & Brand, 2013; Fenko, Kersten & Bialkova, 2015; Hawkes et al., 2015; Turnwald & Crum, 2019), the advertising of superfoods seems to demonstrate the opposite. The sales of supermarkets have increased rapidly once food was marketed as superfoods (Curll, Parker, MacGregor & Perterson, 2016).
Superfood advertising also opposes previous research on food neophobia and the country of origin effect. Food neophobia is defined as people’s refusal to try novel foods; possibly, people fear unknown tastes or expect harmful consequences when trying novel foods (Clarkson, Mirosa & Birch, 2018). Schiemer, Jaspersen and Kauku (2018) point out that superfoods are imported from countries far away in order to meet Western consumers’ needs. The acai berry, for example, originates from the Amazon and is promoted in the West as a superfood that promotes weight loss. Thus, according to the theory of food neophobia, it could be predicted that people are disinclined to try superfoods as they ‘fear’ the unknown too much. However, as sales have increased rapidly by marketing superfoods (Curll, Parker, MacGregor & Perterson, 2016), it may be predicted that novel foods are no obstacle for consumers of superfoods.

Nonetheless, a study by Clarkson, Mirosa and Birch (2018) demonstrates the existence of food neophobia. The authors investigated food neophobia with entomophagy, the consumption of insects. By conducting focus groups, it could be concluded that disgust played an important role when considering the consumption of insects. Possible reasons given by the authors were a lack of knowledge on how to prepare dishes including insects, and a lack of sensory experience. In addition, people make assumptions about how they expect novel food to taste; as these assumptions are mostly negative for insects, the consumption of insects is neglected (Clarkson, Mirosa & Birch, 2018). These results are in line with a study conducted by Vanhonacker et al. (2013). When confronting Flemish participants with alternative, more ecologically friendly meat options, participants were willing to try them. Conversely, when participants were asked to consume insects as an alternative to meat, their attitude dropped significantly. Possibly, food neophobia is an indicator of this behaviour. However, investigating food neophobia with the exposure of insects is an extreme approach to measure food neophobia. As insects are rarely used for consumption in Europe, their visual appearance (eyes and legs specifically) evokes feelings of disgust in people (Clarkson, Mirosa & Birch, 2018). Little research has yet investigated food neophobia by exposing participants to new fruits, for instance. As new fruits compared to insects may be less of a burden to try due to their more appealing appearance, the results of such study may differ to the results presented above.

Besides food neophobia, the marketing strategy of superfoods also contradicts previous research on the country-of-origin effect (COO effect). The COO effect originates from the assumption that the quality of a product is dependent on its country of origin (Juric & Worsley, 1998). Thus, the COO effect can activate concepts that subsequently influence the perception of
certain products. For example, the country’s level of development can play a role. Consumers tend to evaluate products from developed counties higher than products from developing countries (Juric & Worsley, 1998). However, the similarity of a country of origin to one’s own country may also play a role when evaluating foreign products. Additionally, ethnocentrism is a strong determinant of the COO effect (Juric & Worsley, 1998). Ethnocentric people, thus, believe that imports hurt the domestic economy and view their nation or culture as superior to others.

Investigating the impact of the COO effect on purchase preferences, an experiment examining a chocolate tasting demonstrated the existence of the COO effect (Camgöz & Ertem, 2008). In the first condition of the experiment, four milk chocolate bars of the same Turkish brand were shown to participants. However, the package was camouflaged to cover the brand, design and COO of the chocolate. In the second condition of the study, four different COOs were displayed on the chocolate bars (Turkey, Germany, Holland and Switzerland). Results showed a significant change in the purchase preferences between the first and second condition of the experiment. In other words, in the second condition, the chocolate bar displaying Germany as COO was preferred twice as often as in the first condition where no COO was displayed. Thus, participants evaluated the chocolate bar based on the associations they made with the COO displayed on the chocolate bar. Even though this study did not take ethnocentrism into account, it confirms the existence of the COO effect.

To measure the COO effect in relation to ethnocentrism, the Consumer Ethnocentric Tendencies Scale was used in several studies (Chryssochoidis, Krystallis & Perreas, 2007). Investigating Greek participants, Chryssochoidis, Krystallis and Perreas (2007) created a questionnaire consisting of 17 statements tailored to the participants’ consumption behaviour. Thus, statements such as ‘a real Greek should always buy Greek-made products’ or ‘barriers should be put on all imports’ (Chryssochoidis et al., 2007) estimated the level of ethnocentrism within the sample of the study. Results showed that participants displaying ethnocentric behaviour were susceptible to the COO effect. Thus, the country of origin played a role when evaluating the perceived quality of the product. Participants who did not display an ethnocentric behaviour were not susceptible to the COO effect. Hence, the findings of the study confirm the notion that ethnocentrism is a determinant of the COO effect (Juric & Worsley, 1998). As there is evidence for the COO effect (Juric & Worsley, 1998; Chryssochoidis et al., 2007; Camgöz & Ertem, 2008), it can be concluded that the advertising of superfoods contradicts existing research. As mentioned earlier, superfoods often originate from foreign countries in order to meet Western consumers’ needs
(Schiemer et al., 2018). According to the theory of the COO effect, this supposedly negatively influences consumers. Nonetheless, their marketing has been a huge success story.

As previous research investigating food neophobia and the COO effect contradicts the success of superfood advertising, the present study aims to investigate how consumers perceive the advertising of superfoods. Furthermore, most of the research in the field of superfoods has focused on the advertising strategies of superfoods. However, little research has yet focused on the consumers’ perception of superfood advertising. As the advertising of superfoods contradicts the findings that food labelled as tasty are preferred over healthy labelled foods and also are perceived tastier, the findings of this study may shed new light on what is known about how consumers process advertising. Possibly, marketers can benefit from the outcome of the present study with new insight into the way consumers process information. The outcomes may allow businesses to rethink their strategies and target their consumers by using a healthy-focused approach rather than a taste-focused approach. This may even discard the intuition that healthy food is less tasty than unhealthy food and raise awareness of the importance of a balanced nutrition. To fill the gap of previous literature, the following research question is posed:

In what way does the display of the COO and the food labels affect participants’ willingness to try new foods, evaluation of the product and their intention to buy the product?

To answer this research question, several hypotheses were investigated in the present experiment. Research in the field of food labels has shown that tasty food labels are preferred over healthy food labels (Grabenhorst, Schulte, Maderwald & Brand, 2013; Fenko, Kersten & Bialkova, 2015; Turnwald & Crum, 2019). Thus, it could be assumed that healthy or scientific language use when advertising superfoods do not attract consumers. However, a drastic boost in sales (Weitkamp & Eidsvaag, 2014) shows the opposite for superfood advertising. In order to investigate the effect of tasty and scientific food labels, basic food labels were included in the present experiment as a control variable. Therefore, the following hypotheses are posed:

Hypothesis 1a: Scientific language use will increase participants’ willingness to try new foods, evaluation of the product and their intention to buy the product compared to basic and tasty language use.
Hypothesis 1b: Tasty language use will increase participants’ willingness to try new foods, evaluation of the product and their intention to buy the product compared to basic language use.

An interaction between the COO effect and food label was predicted. As superfoods mostly originate from international countries, it may be assumed that the country of origin does not play a role for consumers when purchasing superfoods. However, when exposed to tasty and basic food labels, the COO may play an important role for consumers. Therefore, the following will be hypothesised:

Hypothesis 2a: For tasty and basic food labels in advertising, willingness to try new foods, product evaluation and purchase intention will be increased when exposed to the domestic COO compared to when exposed to the international COO.

Hypothesis 2b: For scientific food labels in advertising, the COO will not play a role for participants when evaluating the willingness to try new foods, evaluating the product and the intention to buy a product.

2. Method
   2.1 Materials

   In the current study, six ads were presented. The first independent variable was country of origin and consisted of two levels: domestic country of origin and international country of origin. As the experiment targeted German respondents, the domestic country of origin was Germany. For each COO level, three ads were created. Therefore, three ads displayed a German COO, whereas the remaining three ads displayed an international COO, namely Asia. All six ads displayed different fruits; for the domestic (German) COO, regional fruits from Germany were used. For the international COO, fruits unknown to the participants were displayed.

   The second independent variable was food label and consisted of three levels: tasty food language, basic food language, and scientific food language. Each of the three levels appeared in both levels of the country of origin. Thus, for both levels of country of origin, one ad contained tasty food language, the other ad contained basic food language, and the third ad contained scientific food language. The foods used for the domestic (German) COO was Elstar apple, plum and
raspberry. Foods used for the international COO were the Baobab fruit, the Rambutan fruit, and the Karela fruit (see Figure 3 - 8 below).

Even though not all of these fruits originate from Asia, it was decided to claim that their COO is Asia in order to minimise biases against countries influencing the results of the study. Furthermore, to minimise external factors influencing the results of the study, all food labels (scientific, basic and tasty) on the ads had the same length. Thus, per ad, the country of origin, including the advertised product and food label differ from each other. However, the length was the same. For the scientific food labels, the content of the ad focused on the nutritional benefits of the product and contained health-claims about the product. Ads containing tasty food language focused on the taste of the product; words, such as crispy or mouth-watering were used. Lastly, ads displaying basic food language solely contained simple information about the product without leading the consumer in a particular direction. An example of an international and domestic ad created for this experiment can be found in the appendix (Appendix A).
2.2 Subjects

In total, 74 participants participated in the experiment (age: \(M = 30.61, SD = 11.01\); gender range: 31 males, 43 females). The only requirement to participate in the experiment was that participants were native German. Participants were recruited through the personal network of the author of this study. The majority of participants indicated to have obtained a bachelor’s degree (28%), followed by a high school degree (23%), master’s degree (19%) and apprenticeship (15%). The remaining 15% of all participants indicated to have obtained education below a high school degree.

2.3 Design

A 2x3 within-subjects design with the independent variable country of origin (domestic versus international) and food labelling (tasty versus basic versus scientific) was used. Each participant was exposed to both levels of the country of origin and all three levels of food label. However, the order in which each participant saw the ads was randomised.

2.4 Instruments

The dependent variables of the study were product evaluation, willingness to try new foods, and the intention to buy the product. The items to measure the dependent variables product evaluation and intention to buy the product were derived from Fenko et al. (2016). The dependent variable product evaluation comprised five items using a semantic differential scale ranging from one (very negative) to five (very positive). The reliability of ‘product evaluation’ was good: \(\alpha = .90\). The dependent variable intention to buy the product aimed to investigate if participants intend to buy the product after the exposure of the ads. It comprised three items using a 7-point Likert scale; the reliability was good: \(\alpha = .92\). Lastly, the dependent variable willingness to try new foods was derived from Matins, Pelchat and Pilner (1997). It comprised four items using a 7-point Likert scale; the reliability was acceptable: \(\alpha = .60\).

To investigate whether or not ethnocentrism and food neophobia influenced the results of the present study, a CET-scale (derived from Chryssochoidis, Krystallis & Perreas, 2007) was used to measure ethnocentrism. The scale comprises 17 items using a 7-point Likert scale. After reversing the item ‘buy foreign products, keep foreign people working’, the reliability of ‘CET scale’ was good: \(\alpha = .89\). Food neophobia was measured using the Food Neophobia Scale (FNS) by Pilner and Hobden (1992). The FNS scale comprised ten items using a 7-point Likert scale. The items ‘I don’t trust new
foods’, ‘if I don’t know what’s in a food, I won’t try it.’, ‘ethnic food looks too weird to eat’, ‘I am afraid to eat things I have never had before’ and ‘I am very particular about the foods I will eat’ were reversed. Afterwards, the reliability of ‘FNS scale’ was acceptable: $\alpha = .74$. All items used for the experiment can be found in the appendix (Appendix B).

2.5 Procedure

Each participant filled in a Qualtrics questionnaire. Before starting the online experiment, the participant was required to give his or her consent by confirming the first page of the questionnaire with ‘I agree’. Subsequently, the participant gave further information about his or her sex, age and level of education. During the experiment, each participant was exposed to six ads; half of the ads displayed a domestic (German) COO, whereas the other half displayed an international (Asian) COO. The system of Qualtrics randomly assigned participants to one of three versions of the experiment. The combination of the advertised food and the level of food label was divided across versions according to a Latin Square design. Thus, in every group, participants were exposed to the same content and fruits; however, the order of the ads and combination of fruits, COO and food label varied. After each exposure of an ad, participants had to fill in questions assessing their willingness to try the advertised food, product evaluation and purchase intention. At the end of the experiment, participants had to fill in a CET-scale and an FNS-scale in order to gain further insight into his or her level of ethnocentrism and food neophobia. The experiment took approximately 6 minutes.

2.6 Statistical treatment

A repeated-measures ANOVA with country of origin and food label as within-subject variables was conducted in order to test the main effects of the present study. Significant interactions were followed-up by conducting one-way ANOVA repeated measures. To investigate whether or not the level of food neophobia and ethnocentrism influenced the results of the experiment, the final data was split according to participant groups displaying high and low levels of food neophobia and ethnocentrism. To do so, the mean score of participants’ answers was calculated. Subsequently, all participants scoring lower than the mean represented one group, whereas all participants scoring higher than the mean represented the other group.
3. Results

For each dependent variable, average scores of the participants’ answers per level of COO and level of food label were created. Furthermore, the level of ethnocentrism and food neophobia were taken into account when analysing the results. In the following, the results of the analyses are displayed in order to eventually answer the research question and hypotheses of the present study.

3.1 The Effect of COO and Food Label

A repeated measures ANOVA for willingness to try new foods with country of origin (COO) and food label as within-subject factors showed a significant main effect of COO on willingness to try new food ($F (1, 146) = 652.17, p < .001$). The display of the domestic COO led to a higher willingness to try new foods ($M = 1.41, SD = .05$) than the display of the international COO ($M = 4.04, SD = .10$). No significant main effect of food label on willingness to try new food was found ($F (2, 146) < 1, p = .577$). Also, no significant interaction was found between COO and food label ($F (2, 146) < 1, p = .924$). All means and standard deviations for willingness to try new foods are displayed in Table 1 below.

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>Basic</td>
<td>1.37 (0.58)</td>
</tr>
<tr>
<td></td>
<td>Tasty</td>
<td>1.47 (0.68)</td>
</tr>
<tr>
<td></td>
<td>Scientific</td>
<td>1.40 (0.60)</td>
</tr>
<tr>
<td>International</td>
<td>Basic</td>
<td>3.96 (1.35)</td>
</tr>
<tr>
<td></td>
<td>Tasty</td>
<td>4.09 (1.18)</td>
</tr>
<tr>
<td></td>
<td>Scientific</td>
<td>4.06 (1.25)</td>
</tr>
</tbody>
</table>

A repeated measures ANOVA for product evaluation with country of origin (COO) and food label as within-subject factors showed a significant main effect of COO on product evaluation ($F (1, 146) = 165.41, p < .001$). The display of a domestic COO led to a higher product evaluation ($M = 1.85, SD = .06$) than the display of an international COO ($M = 3.09, SD = .06$). No significant main effect of food label on product evaluation was found ($F (2, 146) = 1.29, p = .278$). Furthermore, no significant interaction was found between COO and food label ($F (2, 146) = 1.31, p = .277$). All means and standard deviations for product evaluation are displayed in Table 2 below.
Lastly, a repeated measures ANOVA for product evaluation with country of origin (COO) and food label as within-subject factors showed a significant main effect of COO on purchase intention ($F(1, 146) = 140.45, p < .001$). The display of a domestic COO led to a higher purchase intention ($M = 2.30, SD = .14$) compared to the display of an international COO ($M = 4.55, SD = .15$). It also showed a significant main effect of food label on purchase intention ($F(2, 146) = 3.34, p = .038$). The purchase intention for scientific food labels ($M = 3.29, SD = 0.12$) was higher than for tasty food labels ($p = .014$, Bonferroni-correction; $M = 3.61, SD = 0.13$). There was no significant difference between the purchase intention of basic food label ($M = 3.39, SD = 0.14$) and tasty and scientific food label ($p < .335$, Bonferroni-correction). No significant interaction was found between COO and food label ($F < 1, p = .612$). All means and standard deviations are displayed in Table 3 below.

**Table 3**

Means and standard deviations (between brackets) for the effect of COO and food label on purchase intention (1 = high purchase intention, 7 = low purchase intention)

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
<td>Tasty</td>
</tr>
<tr>
<td>Domestic</td>
<td>2.34 (1.53)</td>
<td>2.46 (1.64)</td>
</tr>
<tr>
<td>International</td>
<td>4.45 (1.59)</td>
<td>4.75 (1.47)</td>
</tr>
</tbody>
</table>
### 3.2 The Effect of Food Neophobia

In order to test for an effect of the participants’ level of food neophobia, participants’ responses were split into high and low level of food neophobia. For the FNS scale (Food Neophobia Scale), the mean score of participants’ answers was 3.7. Therefore, participants with a score higher than 3.7 were placed in the ‘high FN’ group. All participants with a score lower than 3.7 formed the ‘low FN’ group.

In the low food neophobia group, a repeated measures ANOVA for willingness to try new foods with country of origin (COO) and food label as within-subject factors showed a significant main effect of COO on willingness to try new foods ($F(1, 32) = 230.96, p < .001$). The display of a domestic COO led to a higher willingness to try new foods than the display of an international COO. No significant main effect of food label was shown ($F < 1, p = .880$) and no significant interaction between COO and food label was found ($F < 1, p = .643$). In the high food neophobia group, the same ANOVA showed a significant main effect of COO on willingness to try new foods ($F(1, 40) = 437.87, p < .001$). The display of a domestic COO led to a higher willingness to try new foods than the display of an international COO. No significant main effect of food label on willingness to try new foods ($F(2, 80) = 1.59, p = .211$). Also, no significant interactions between COO and food label were found ($F < 1, p = .603$). All means and standard deviations are displayed in Table 4 below.

<table>
<thead>
<tr>
<th>Food Neophobia Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Basic</td>
<td>1.34 (0.47)</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>Tasty</td>
<td>1.39 (0.57)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>1.34 (0.49)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>Basic</td>
<td>4.03 (1.35)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tasty</td>
<td>3.83 (1.31)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>3.96 (1.08)</td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>Basic</td>
<td>1.40 (0.65)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tasty</td>
<td>1.53 (0.76)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>1.44 (0.63)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>Basic</td>
<td>3.91 (1.36)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tasty</td>
<td>4.30 (1.03)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>4.15 (1.38)</td>
</tr>
</tbody>
</table>

In the low food neophobia group, a repeated measures ANOVA for product evaluation with country of origin (COO) and food label as within-subject factors showed a significant main effect of
COO on product evaluation \((F(1, 32) = 134.26, p < .001)\). The display of a domestic COO led to a better product evaluation than the display of an international COO. No significant main effect of food label was found \((F < 1, p = .682)\), and no significant interaction between COO and food label was found \((F(2, 64) = 2.93, p = .061)\). In the high food neophobia group, the same ANOVA showed a significant main effect of COO on product evaluation \((F(1,40) = 61.41, p < .001)\). The display of a domestic COO led to a better product evaluation than the display of an international COO. No significant main effect of food label on product evaluation \((F (2, 80) = 1.08, p = .345)\). Also, no significant interaction was found between COO and food label \((F < 1, p = .954)\). All means and standard deviations are displayed in Table 5 below.

**Table 5** Means and standard deviations (between brackets) for the effect of COO and food label on product evaluation \((1 = \text{positive}, 5 = \text{negative})\)

<table>
<thead>
<tr>
<th>Food Neophobia Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Domestic</td>
<td>Basic</td>
<td>1.67 (0.58)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>Basic</td>
<td>3.13 (0.90)</td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>Basic</td>
<td>2.01 (0.92)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>Basic</td>
<td>3.18 (0.67)</td>
</tr>
</tbody>
</table>

Lastly, in the low food neophobia group, a repeated measures ANOVA for purchase intention with country of origin (COO) and food label as within-subject factors showed a significant main effect of COO on purchase intention \((F (1, 32) = 78.62, p < .001)\). The display of a domestic COO led to a higher purchase intention than the display of an international COO. No significant main effect was found for food label \((F(2, 64) = 1.55, p = .221)\), and no significant interaction was found between COO and food label \((F < 1, p = .440)\). In the high food neophobia group, the same ANOVA showed a significant main effect of COO on purchase intention \((F(1, 40) = 94.19, p < .001)\). Thus, the display of a domestic COO led to a higher purchase intention than the display of an international COO. No significant main effect of food label on purchase intention \((F < 1, p = .888)\). Also, no significant interaction was found \((F < 1, p = .971)\). All means and standard deviations are displayed in Table 6 below.
Table 6: Means and standard deviations (between brackets) for the effect of COO and food label on purchase intention (1 = high purchase intention, 7 = low purchase intention)

<table>
<thead>
<tr>
<th>Neophobia Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
<td>Tasty</td>
<td>Scientific</td>
</tr>
<tr>
<td>Low</td>
<td>Domestic</td>
<td>2.23 (1.36)</td>
<td>2.11 (1.42)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>4.34 (1.74)</td>
<td>4.55 (1.54)</td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>2.43 (1.66)</td>
<td>2.75 (1.77)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>4.53 (1.47)</td>
<td>4.91 (1.40)</td>
</tr>
</tbody>
</table>

3.3 The Effect of Ethnocentrism

In order to see an effect of the participants’ level of ethnocentrism, participants’ responses were split into high and low level of ethnocentrism. For the CET scale, the mean score of participants’ answers was 5.29. Thus, participants with a score higher than 5.29 formed the ‘low CET’ group, whereas participants with a score lower than 5.29 formed the ‘high CET’ group.

In the high ethnocentrism group, a repeated measures ANOVA for willingness to try new foods with COO and food label as within-subject factors showed a significant main effect of COO on willingness to try new foods ($F(1, 33) = 273.39, p < .001$). Thus, the display of a domestic COO led to a higher willingness to try new foods than the display of an international COO. No significant main effect of food label ($F(2, 66) = 1.40, p = .253$). Also, no significant interaction was found between COO and food label ($F < 1, p = .454$). In the low ethnocentrism group, the same ANOVA showed a significant main effect of COO on willingness to try new foods ($F(1, 39) = 392.99, p < .001$). The display of a domestic COO led to a higher willingness to try new foods than the display of an international COO. No significant main effect was found for food label ($F < 1, p = .850$). Also, no significant interaction effect between COO and food label was found ($F < 1, p = .445$). All means and standard deviations can be found in Table 7 below.
Table 7  Means and standard deviations (between brackets) for the effect of COO and food label on willingness to try new foods (1 = high willingness, 7 = low willingness)

<table>
<thead>
<tr>
<th>Ethnocentrism Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Basic</td>
<td>Tasty</td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>1.30 (0.55)</td>
<td>1.37 (0.61)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>3.92 (1.50)</td>
<td>4.32 (1.32)</td>
</tr>
<tr>
<td>Low</td>
<td>Domestic</td>
<td>1.43 (0.60)</td>
<td>1.55 (0.74)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>4.00 (1.22)</td>
<td>3.89 (1.02)</td>
</tr>
</tbody>
</table>

In the high ethnocentrism group, a repeated measures ANOVA for product evaluation with COO and food label as within-subject factors showed a significant main effect of COO on product evaluation (\( F(1, 33) = 201.42, p < .001 \)). The display of a domestic COO led to a better product evaluation than the display of an international COO. No significant main effect of food label on product evaluation (\( F(2, 66) = 2.79, p = .068 \)). Also, no significant interaction effect was found between COO and food label (\( F < 1, p = .885 \)). In the low ethnocentrism group, the same ANOVA showed a significant main effect of COO on product evaluation (\( F(1, 39) = 48.65, p < .001 \)). The display of a domestic COO led to a better product evaluation than the display of an international COO. No significant main effect of food label on product evaluation (\( F < 1, p = .824 \)). The main effects of product evaluation were qualified by a significant interaction between COO and food label (\( F(2, 78) = 3.21, p = .046 \)). However, conducting further repeated measures ANOVAs in order to follow up the significant interaction revealed that post hoc tests found no effect of food label on the domestic (\( F < 1 \)) or international COO condition (\( F(2, 78) = 2.30, p = .107 \)). The display of means, however, indicates a pattern. Low ethnocentric participants seemed to rate tasty food labels lowest in the domestic COO condition, whereas they rated tasty food labels highest in the international COO condition. All means and standard deviations are displayed in Table 8 below.
Table 8  Means and standard deviations (between brackets) for the effect of COO and food label on product evaluation (1 = positive, 5 = negative)

<table>
<thead>
<tr>
<th>Ethnocentrism Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Tasty Scientific</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>1.76 (0.61)</td>
<td>1.76 (0.78)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>3.18 (0.85)</td>
<td>3.28 (0.65)</td>
</tr>
<tr>
<td>Low</td>
<td>Domestic</td>
<td>1.95 (0.93)</td>
<td>2.10 (0.90)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>3.14 (0.72)</td>
<td>2.87 (0.66)</td>
</tr>
</tbody>
</table>

In the high ethnocentrism group, a repeated measures ANOVA for purchase intention with COO and food label as within-subject factors showed a significant main effect of COO on purchase intention ($F(1, 33) = 105.08, p < .001$). Again, the display of the domestic COO led to a higher purchase intention than the display of an international COO. No significant main effect of food label on purchase intention ($F < 1, p = .440$). The main effects were qualified by a significant interaction between COO and food label ($F(2, 66) = 4.51, p = .015$). However, conducting further repeated measures ANOVAs to follow up the significant interaction revealed that post hoc tests found no effect of food label on the domestic condition ($F(2, 66) = 2.36, p = 102$) or international condition ($F(2, 66) = 2.96, p = .059$). The display of means, however, indicates a pattern. High ethnocentric rated the tasty food label lowest when exposed to an international COO, whereas they rated scientific food labels highest when exposed to a domestic COO. In the low ethnocentrism group, the same ANOVA showed significant main effects of COO ($F(1, 33) = 105.08, p < .001$). The display of a domestic COO led to higher purchase intentions than the display of an international COO. No significant main effect of food label ($F(2, 78) = 2.68, p = .075$). Also, no significant interaction between COO and food label was found ($F < 1, p = .390$). All means and standard deviations are displayed below in Table 9.
<table>
<thead>
<tr>
<th>Ethnocentrism Group</th>
<th>Country of Origin</th>
<th>Food Label</th>
<th>M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Basic</td>
<td>Tasty</td>
</tr>
<tr>
<td>High</td>
<td>Domestic</td>
<td>2.47 (1.58)</td>
<td>2.14 (1.19)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>4.35 (1.62)</td>
<td>4.99 (1.66)</td>
</tr>
<tr>
<td>Low</td>
<td>Domestic</td>
<td>2.23 (1.51)</td>
<td>2.74 (1.91)</td>
</tr>
<tr>
<td></td>
<td>International</td>
<td>4.53 (1.58)</td>
<td>4.54 (1.27)</td>
</tr>
</tbody>
</table>

4. Conclusion

The results of the present study show that scientific language use in advertising increases participants’ purchase intention compared to basic and tasty language uses. However, contrary to the hypotheses, this effect could not be confirmed for participants’ willingness to try new foods and product evaluation. The display of COO influenced the participants’ willingness to try new foods, product evaluation and purchase intention. Hence, it can be concluded that the country of origin of products plays an important role for consumers. More specifically, participants were more willing to try new foods, evaluated the product better and had a higher purchase intention when exposed to the domestic (German) COO instead of the international COO. The prediction of an interaction between COO and food label could not be confirmed by the results of the study; the combination of COO and food label did not influence participants’ willingness to try new foods, product evaluation and purchase intention.

Food neophobia and ethnocentrism were tested in order to see whether they influence participants’ willingness to try new foods, product evaluation and purchase intention. However, food neophobia and ethnocentrism did not influence the results. More specifically, participants, regardless of their level of food neophobia or ethnocentrism, were influenced by the display of COO in the ad in the same way. Again, the domestic COOs were rated higher for all three dependent variables compared to the international COOs. However, contrary to previous results, no effect of food label was found in either of the food neophobia and ethnocentrism groups. Thus, food label does not affect purchase intention once food neophobia and ethnocentrism are taken into account.

An interaction was found when investigating the effect of high ethnocentrism on purchase intention. Although follow up tests were inconclusive, patterns can be observed when studying the
means. As the mean for the tasty food label is lowest in the international COO condition, it can be concluded that high ethnocentric people do not believe that international fruits are tasty. Furthermore, the scientific food label was rated highest in the domestic COO condition. Thus, contrary to previous predictions, high ethnocentric people appreciate superfoods most when their origin is domestic compared to an international origin. A second interaction was found when investigating the effect of low ethnocentrism on product evaluation. Although follow up tests were inconclusive again, patterns can be observed when studying the means. The means show that in the international COO condition, the tasty food label was rated most positive, whereas in the domestic COO condition, the tasty food label was rated lowest. Possibly, and contrary to previous predictions, low ethnocentric participants are more open to different cultures, and thus believe that international fruits are indeed tasty.

5. Discussion

As previous research in the field of superfood advertising has mostly focused on the advertising strategies of superfoods, it was the present study’s primary aim to fill the gap of research in the field of consumers’ perception of superfood marketing. More specifically, it was investigated how food labels and the display of COOs can affect the willingness to try new foods, product evaluation and purchase intention. An online experiment was conducted in which participants had to evaluate six different ads each containing domestic or international fruits accompanied by domestic or international COOs and basic, tasty or scientific food labels. Food neophobia and ethnocentrism were investigated to explore whether they would influence participants’ willingness to try new foods, product evaluation and purchase intention.

A main finding of the present study was that purchase intention of participants was highest when exposed to the scientific food label. These findings oppose the outcomes of Turnwald and Crum (2019). The authors found that vegetables accompanied by tasty food labels were bought more frequently by students in a university cafeteria than vegetables accompanied by healthy food labels. Being exposed to food in a cafeteria leading to an immediate purchase may evoke different responses than the sole exposure of advertising containing food. Perhaps, participants in the present study have responded in a way that expresses their ideals. However, if people choose a meal for immediate consumption as in the study by Turnwald and Crum (2019), they may choose a meal to satisfy their cravings, which leads them to choose meals accompanied by tasty labels instead of healthy labels. Thus, people do not act according to their ideal but according to their craving in
that moment. Furthermore, a difference can be observed between the healthy food labels by Turnwald and Crum (2019) and the scientific food labels of the present study. Turnwald and Crum (2019) use words such as ‘light’ and ‘healthy choice’ for their healthy food label to promote low calories, and a restrictive diet. In the present study, the scientific food label focuses on the benefits of eating healthy by using keywords such as ‘anti-ageing’ and ‘vitamin boost’. Possibly, the exposure of health benefits in advertising evoke more positive feelings in consumers compared to restrictive wordings.

In addition, Glanz et al. (1998) showed that participants listed taste as most important factor when choosing food. These findings oppose the results of the present study. As the purchase intention was highest when participants were exposed to the scientific food label, it may be suggested that health benefit was the most important factor for participants when intending to buy the fruit. However, the study by Glanz et al (1998) differs from the experiment of the present study as their participants were not exposed to food labels. In their study, participants merely filled in online surveys about their lifestyle and health. Immediate responses after the exposure to fruit advertising, such as in the present study, may therefore lead to more accurate results. Furthermore, the authors claim that consumers evaluate foods according to their expectations (Glanz et al., 1998). As fruits are mostly consumed as a light dessert or healthy snack, it is likely that people perceive fruits as health-improving compared to other kinds of dessert, such as chocolate. Thus, the combination of fruits with scientific food labels may have met participants expectations more than the combination of fruits with tasty or basic food labels. Possibly, the expectation of foods high in calories in advertising matches a tasty food label more than a scientific food label. As Sikka (2017) pointed out, using ‘quasi-scientific ideology’ in superfood advertising, as it was used in the present study, makes consumers think of superfoods as something ‘superior’ to other foods; foods that are not advertised as superfoods seem ‘inferior’ to consumers. Since the present study was a within-subject design, participants may have felt ‘superior’ when rating the scientific food labels higher than the tasty and basic food labels. A between-subject design, in which each participant is only exposed to one level of food label (basic, tasty or scientific) could exclude this effect. Therefore, future research may focus on replicating the present study as a between-subject design to see whether the results differ. Additionally, a comparison of different foods, such as fruits and a dessert high in calories, may give further insight into the assumption that consumers prefer food labels that match their expectations of certain foods.
Furthermore, the results of the present study are in line with the grounded cognition theory of desire (Papies et al., 2017); the theory suggests that food labels can evoke previously learned situated conceptualisations which affect consumers expectations.

Furthermore, the grounded cognition theory suggests that food labels can evoke previously learned situated conceptualisations which affect consumers expectations (Papies et al., 2017). The authors claim that the exposure of attractive foods high in calories in advertising compared to neutral and low-calorie food activates areas in the brain that are connected to gustatory and reward processing. Although the present study did not include high-calorie food in the experiment, results show that scientific food labels lead to a better purchase intention than basic and tasty food labels. Thus, the results of the present study confirm a positive effect of superfood advertising on consumers purchase intention. Therefore, the claim that foods high in calories lead to positive consumer perceptions seems contradicting to the findings of the present study. However, a possible explanation for it may be that tasty food labels are more effective for high calorie foods, such as chocolate, than fruits due to consumers previously learned situated conceptualisations that high calorie foods are connected to gustatory and reward processing. Thus, cues, such as ‘anti-ageing’ or ‘high in minerals’, in scientific food labels do not match with consumers’ expectations when exposed to foods high in calories. Instead, these cues match consumers expectations when exposed to foods that are considered healthy, such as fruits. Therefore, it is possible, that the cues for the tasty food labels in the present study, such as ‘sugar-coated’ or ‘honeyed dream’, did not match consumers expectation when exposed to fruits. As mentioned earlier, future research should focus on a comparison between foods high in calories and foods considered as healthy in order to test these assumptions.

Another aim of the present study was to investigate the COO effect in relation to superfood advertising. The results of the present study have confirmed the existence of the COO effect. Indeed, the exposure of a domestic COO led to a higher willingness to try new foods, higher product evaluations and higher purchase intentions than the exposure of an international COO. Thus, the findings of the present study are in line with the results by Camgöz and Ertem (2008), who could also provide evidence for the COO effect. Additionally, Chryssochoidis, Krystallis and Perreas (2007) found that ethnocentrism is a determinant of the COO effect. When investigating the effect of the participants’ level of ethnocentrism on their willingness to try new foods, product evaluation and purchase intention, the results did not differ between the high and low ethnocentric participants. Therefore, the present results oppose findings of Chryssochoidis et al (2007). However, means
indicate that high ethnocentric participants evaluated the willingness to try new foods, product evaluation and purchase intention slightly better when exposed to the domestic COO compared to the international COO. Although the results of this study could not confirm ethnocentrism as a determinant of the COO effect, the display of means indicate a possible relation between ethnocentrism and the COO effect. As the total number of participants were divided into two groups (high and low ethnocentric participant groups) to test ethnocentrism, the sample sizes per group were fairly small. To further investigate the effect of ethnocentrism on the COO effect, future research may recruit more participants per ethnocentrism group. Thereby, the effect of ethnocentrism on the COO effect may become clearer. However, as global warming has become an immense topic of concern during the past decade, it is possible that participants have consciously chosen to rate the domestic COO higher than the international COO due to their commitment to fight global warming. In order to see whether global warming is a motivation for consumers to choose domestic foods over international foods, future research may include questions aiming to investigate participants’ concerns about global warming.

Interactions were found between the COO and food label when investigating the effect of ethnocentrism on product evaluation and purchase intention. However, follow up tests appeared to be inconclusive. Thus, it is challenging to draw final conclusions from the interactions as the follow ups tests lack strength. Even though the display of means allowed some interpretations of the interactions, definite conclusions cannot be drawn. As mentioned earlier, the small sample sizes of both ethnocentrism groups may be an explanation for the inconclusive findings and shall be increased when replicating the study. No further possible explanation can be given at this point to explain the inconclusiveness of these interactions. The lack of understanding for these inconclusive interactions may be great motivation for further research.

The investigation of the effect of food neophobia on food label and COO did not reveal any effects on participants’ willingness to try new foods, product evaluation and purchase intention. More specifically, no differences were revealed between high and low food neophobic participants when evaluating their willingness to try new foods, product evaluation and purchase intention. Both food neophobia groups evaluated ads accompanied by a domestic (German) COO better than the ads accompanied by an international COO. Thus, food neophobia was displayed by all participants even though no differences between the groups could be found. The results of the present study, therefore, align with previous research in the field (Vanhonacker et al., 2013; Clarkson et al., 2018). A possible explanation for all participants displaying a food neophobic behaviour may be the
participants’ concern for global warming. Regardless their level of food neophobia, participants may have intended to buy a German product rather than an international product in order to save their environment. In that case, the behaviour of food neophobic participants would not have differed from participants not displaying a food neophobic behaviour. However, in order to provide evidence for this suggestion, future research should further investigate the effect of the concern for global warming on food advertising. However, due to the fairly small sample sizes of both groups, it may also be argued that an obvious effect of food neophobia was absent. By replicating the study aiming to increase the participant number per food neophobia group, a larger effect may become present.

Lastly, no interaction was found between the COO and food label. Possibly, participants prioritised the food label over the COO, or vice versa. When observing the ad, participants may have been convinced by the display of food label, which led them to ignore the COO when evaluating the ad. The scientific food label in the present study, for example, contained words, such as ‘research has shown’, which may have convinced participants of the product without taking the COO into account. On the other hand, the display of the COO could have been in line participants lifestyles. The display of a domestic COO, for example, may be convincing for consumers concerned about the environment. In that case, participants chose a domestic product over an international product; the food label then did not play a role when evaluating the ad. Thus, it is likely that the prioritisation of either the COO or food label led to the absence of an interaction. Furthermore, cultural differences between the domestic (German) and international (Asian) COO could have influenced the credibility of the food labels. As basic food labels of the present study often included words, such as ‘Sunday cake’ and ‘suited for dessert’, participants may have found that these labels are not in line with the culture of Asia. Sunday cakes, for instance, could be perceived as a Western tradition. On the hand, words such as ‘exotic’, used for the tasty food labels may not be in line with the expectations of a domestic COO. For these reasons, participants may have focussed on either the COO or food label in the ads and have not considered both of them when evaluating the ads. Further research may want to focus on food labels that are more neutral and fitting across cultures. Again, the awareness of global warming may play a role here and could be an indicator for the absence of the interaction between COO and food label.

The explanations for the results display a number of possible limitations of the present study. As global warming has become a topic of concern during the past decade and influences our future generations especially, participants’ awareness and willingness to fight global warming could be an indication for some findings of this study. Additionally, the lifestyle of participants may have played
a crucial role when evaluating the ads. As pointed out by Glanz et al. (1998), a person trying to lose weight, or intending to eat healthy may have evaluated the ads differently than a person who choses food due to convenience or taste. Lastly, a larger sample size seems to reveal further insights into the effects of ethnocentrism and food neophobia on superfood advertising. Future research may replicate the present study taking these limitations into account. Nonetheless, the findings of the current study contribute to research in the field of superfood advertising and sheds new light on consumers’ perception on superfood advertising. As predicted earlier, the advertising of superfoods indeed contradicts research in the field of food labelling in advertising. The results show that superfood advertising increases consumers’ purchase intentions, and that the display of COOs plays an important role for consumers. With the novel finding that a domestic COO was preferred for superfoods compared to an international COO, further insights were revealed about the way consumers process advertising. This finding may be used by marketers in their advantage to increase sales. Additionally, it may also be used to motivate people to consume more domestic products and fight global warming. Healthy food labels can also be a useful tool to increase public awareness of the importance of a healthy and balanced nutrition.
6. References


Appendix A

Ad Version of an international fruit

Basic Food Label

Knack die harte Schale der Baobab Frucht und ein überraschender Inhalt wartet auf Dich!

Herkunftsland Asien

Tasty Food Label

Die Baobab Frucht ist ein feines und aromatisches Geschmackserlebnis, dass deine Geschmacksknospen zum Lächeln bringen!

Herkunftsland Asien

Scientific Food Label
Ad version of a domestic fruit

Basic

Die farbenfrohe Himbeere mit ihrer einzigartigen Erscheinung lässt jedes Dessert besonders aussehen und ist bei jedem beliebt!

Herkunftsland Deutschland
Die köstlich fruchtige Himbeere lässt deine Zunge den Geschmack von purem Glück und lieblicher Erfüllung verspüren!

Herkunftsland Deutschland

Die mineral-haltige und kalorienarme Himbeere verspricht einen anti-ageing Effekt, was eine Vielzahl von Studien bestätigt!

Herunftsland Deutschland
Appendix B

Items Used for Dependent Variables

Dependent Variable: Product Evaluation (derived from Fenko et al., 2016)

I find this product

1. Very good – very bad
2. Very unpleasant – very pleasant
3. Very unattractive – very attractive
4. Very rejecting – very inviting
5. Very unhealthy – very healthy

Dependent Variable: Purchase Intention (derived from Fenko et al., 2016)

1. I would buy this product if I happened to see it in a store.
2. I would actively seek out this product in a store.
3. I would consider buying this product.
4. I would recommend this product to others.

Dependent Variable: Willingness to Try New Foods (derived Matins, Pelchat & Pilner, 1997)

1. I would be willing to eat a small amount of this food in this experiment.
2. This food is familiar to me.
3. This food is high in vitamins.
4. I think I would like the taste of this food.

CET Scale (derived from Chryssochoidis, Krystallis & Perreas, 2007)

1. German people should always buy German-made products instead of imports.
2. Only those products that are unavailable in a country should be imported.
4. German products first, last and foremost.
5. Purchasing foreign-made products is anti-German.
6. It is not right to purchase foreign-made products, because it puts German people out of jobs.
7. A real German person should always buy German-made products.
8. We should purchase products manufactured in Germany instead of letting other countries get rich out of us.
9. It is always better to purchase German products.
10. There should be very little trading or purchasing of goods from other countries unless out of necessity.
11. The German should not buy foreign products, because this hurts German business and cause unemployment.
12. Barriers should be put on all imports.
13. It may cost me in the long run but I prefer to support German products.
14. Foreigners should not be allowed to put their products in our markets.
15. Foreign products should be taxed heavily to reduce their entry into Germany.
16. We should buy from foreign countries only those products that we cannot obtain within our own country.
17. German consumers who purchase products made in other countries are responsible for putting their fellow German out of work.

Food Neophobia Scale (derived from Pilner & Hobden, 1992)

1. I am constantly sampling new and different foods.
2. I don’t trust new foods.
3. If I don’t know what’s in a food, I won’t try it.
4. I like foods from different countries.
5. Ethnic food looks too weird to eat.
6. At dinner parties, I will try a new food.
7. I am afraid to eat things I have never had before.
8. I am very particular about the foods I will eat.
9. I will eat almost anything.
10. I like to try new ethnic restaurants.