



Archived at the Flinders Academic Commons:

<http://dspace.flinders.edu.au/dspace/>

‘This is the peer reviewed version of the following article:

Tonkin, E., Wilson, A. M., Coveney, J., Meyer, S. B.,

Henderson, J., McCullum, D., ... Ward, P. R. (2019).

Consumers respond to a model for (re)building consumer trust in the food system. *Food Control*, 101, 112–120.

<https://doi.org/10.1016/j.foodcont.2019.02.012>

which has been published in final form at

<https://doi.org/10.1016/j.foodcont.2019.02.012>

© 2019 Elsevier Ltd. This manuscript version is made available under the CC-BY-NC-ND 4.0 license:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

# Accepted Manuscript

Consumers respond to a model for (re)building consumer trust in the food system

Emma Tonkin, Annabelle M. Wilson, John Coveney, Samantha B. Meyer, Julie Henderson, Dean McCullum, Trevor Webb, Paul R. Ward



PII: S0956-7135(19)30060-X

DOI: <https://doi.org/10.1016/j.foodcont.2019.02.012>

Reference: JFCO 6518

To appear in: *Food Control*

Received Date: 7 October 2018

Revised Date: 11 January 2019

Accepted Date: 18 February 2019

Please cite this article as: Tonkin E., Wilson A.M., Coveney J., Meyer S.B., Henderson J., McCullum D., Webb T. & Ward P.R., Consumers respond to a model for (re)building consumer trust in the food system, *Food Control* (2019), doi: <https://doi.org/10.1016/j.foodcont.2019.02.012>.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Consumers respond to a model for (re)building consumer trust in the food system

Emma Tonkin <sup>a</sup>

Annabelle M Wilson <sup>a</sup>

John Coveney <sup>b</sup>

Samantha B Meyer <sup>c</sup>

Julie Henderson <sup>d</sup>

Dean McCullum <sup>e</sup>

Trevor Webb <sup>f</sup>

Paul R Ward <sup>a</sup>

<sup>a</sup> College of Medicine and Public Health, Flinders University, Bedford Park, South Australia, Australia, 5042. [annabelle.wilson@flinders.edu.au](mailto:annabelle.wilson@flinders.edu.au); [emma.tonkin@flinders.edu.au](mailto:emma.tonkin@flinders.edu.au); [paul.ward@flinders.edu.au](mailto:paul.ward@flinders.edu.au)

<sup>b</sup> College of Nursing and Health Sciences, Flinders University, Bedford Park, South Australia, Australia, 5042. [john.coveney@flinders.edu.au](mailto:john.coveney@flinders.edu.au)

<sup>c</sup> School of Public Health and Health Systems, University of Waterloo, 200 University Ave W, Waterloo, ON N2L 3G1, Canada. [samantha.meyer@uwaterloo.ca](mailto:samantha.meyer@uwaterloo.ca)

<sup>d</sup> Southgate Institute for Health, Society and Equity, Flinders University, Bedford Park, South Australia, Australia, 5042. [julie.henderson@flinders.edu.au](mailto:julie.henderson@flinders.edu.au)

<sup>e</sup> Food and Controlled Drugs Branch, Public Health Services, Public Health and Clinical Systems, SA Health, 11 Hindmarsh Square, Adelaide, South Australia, Australia, 5000. [dean.mccullum@sa.gov.au](mailto:dean.mccullum@sa.gov.au)

<sup>f</sup> Behavioural & Regulatory Analysis Section, Food Standards Australia New Zealand, Majura Park, Australian Capital Territory, Australia, 2609. [trevor.webb@foodstandards.gov.au](mailto:trevor.webb@foodstandards.gov.au)

### Corresponding author

Emma Tonkin

College of Medicine and Public Health

Level 2 Health Sciences Building,

Registry Road, Bedford Park South Australia

GPO Box 2100

Adelaide SA 5001

Tel: 08 7221 8462

Fax: 08 7221 8424

Emma.tonkin@flinders.edu.au

#### **Declarations of Interest**

None.

#### **Funding**

The study was funded by a Flinders University Faculty of Medicine, Nursing and Health Sciences Small Competitive Research Grant. The funder had no input into or role in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication.

# 1 Consumers respond to a model for (re)building consumer trust in the 2 food system

## 3 Abstract

4 Researchers and food system actors have developed a best practice model to assist with (re)building  
5 or maintaining consumer trust in the food system in the event of a food incident. The aim of the  
6 present study was to determine how well the model aligns with consumer views of the strategies  
7 required to maintain consumer trust during and following a food incident. This qualitative public  
8 deliberation study employed experimental, developmental vignettes during 2 full-day sessions in  
9 May 2018. Following general discussion of the food incident scenario presented in the vignettes, 15  
10 South Australian adults (in two groups) developed a collated and ranked list of key strategies to be  
11 used by food system actors during a food incident to assist in maintaining consumer trust.  
12 Participants were then introduced to the existing model, and engaged in discussions about if and  
13 how their strategies aligned with those in the existing model. Findings demonstrate broad  
14 consistency between the two groups and the model in the strategies identified as key for  
15 (re)building and maintaining consumer trust during a food incident. For example, timely  
16 transparency was reported by consumers as the key strategy for maintaining consumer trust during  
17 and after a food incident. However, participants expressed pessimism regarding actors' ability to  
18 implement strategies. Although minimal, differences were noted in strategy descriptions between  
19 the groups and the Model. This study suggests that overall the model is highly consistent with  
20 consumer views. If actors are to demonstrably apply the Model in the event of a food incident, our  
21 data suggest that the identified strategies will successfully assist them in (re)building and/or  
22 maintaining consumer trust in the food supply.

## 23 Keywords

24 Consumers, trust, food system, food incident, food regulator, food industry

## 25 1. Introduction

26 Consumer trust is essential for the functioning of food systems globally. For consumers, trust is one  
27 pathway for reducing the complexity and uncertainty they are faced with in engaging with modern  
28 food systems (Bildtgard, 2008; Tonkin et al., 2016). The value of consumer trust to the market lies in  
29 its fundamental role in enabling food markets to function with the general support of the  
30 community, also known as social license (Arnot, 2011). Social license is maintained as long as public  
31 trust is maintained, and must be supported by expensive, inflexible and onerous regulatory structure  
32 when consumer trust is lost (Arnot, 2011). As such, the globalised food market is dependent on  
33 consumer trust in a foundational sense, as well as for its obvious importance for individual  
34 companies and brands. Further, because of their complexity, even with functional social license,  
35 globalised food systems require extensive regulation and critical oversight, and consumer trust  
36 legitimises the authority of governments to conduct these activities (Houghton et al., 2008; Wynne,  
37 2002) (see also Henderson et al. (2012); Meyer et al. (2012); Tonkin et al. (2015)). Threats to  
38 consumer trust can come from many sources, but food incidents, whether food safety incidents or  
39 food fraud cases (Spink & Moyer, 2011), present a major and ongoing challenge (Cope et al., 2010).  
40 Numerous high-profile food safety and fraud incidents have shaken consumer trust in food systems  
41 globally over the last two decades; for example melamine in milk in China, the horsemeat scandal  
42 across Europe, the plasticizer incident in Taiwan, food fraud in Brazil, the dioxin crisis in Ireland and

43 the notorious BSE crisis in the United Kingdom. The specific details of how these incidents came  
44 about and the resultant consumer purchasing behaviours and market outcomes have been highly  
45 publicised and amply studied (Dey & Montet, 2017; Jacob et al., 2011; Regan et al., 2015; Regan et  
46 al., 2016; Thomson et al., 2012; Xiu & Klein, 2010; Yamoah & Yawson, 2014). A lesser focus of this  
47 literature however is consumer perspectives of strategies for the management and repair of their  
48 trust in the fallout from these incidents. Barnett et al. (2016) report that in the wake of the  
49 horsemeat food fraud incident across Europe, consumers described needing tougher penalties for  
50 fraudsters, more information and transparency, as well as shorter food chains and improved use of  
51 food labels to rebuild their confidence in meat products, and therefore reinstate previous  
52 purchasing behaviour. While these are useful practical suggestions, this literature in general lacks a  
53 comprehensive and systematic examination of consumer opinion regarding how food system actors  
54 can (re)build or maintain consumer trust following food incidents more broadly.

55 Wilson et al. (2016) previously published an evidence-based best practice model for (re)building and  
56 maintaining consumer trust in the food supply before, during and after food incidents (hereafter 'the  
57 Model'). The Model was developed through eliciting the views of 105 food system actors including  
58 food industry, food regulatory and media actors from the United Kingdom, Australia and New  
59 Zealand regarding the strategies they saw as important for managing consumer trust around a food  
60 incident. Fifty-eight participants went on to participate in a member-checking and strategy ranking  
61 exercise. The Model centres on 10 strategies identified by the participants, including: (1) be  
62 transparent, (2) have protocols and procedures in place, (3) be credible (4) be proactive, (5) put  
63 consumers first, (6) collaborate with stakeholders, (7) be consistent, (8) educate stakeholders and  
64 consumers, (9) build your reputation and (10) keep your promises. The Model includes a description  
65 for how each of the 10 strategies should be implemented by media, food industry and regulators.  
66 Although the Model is thought to be best practice by food system actors in the regions studied and  
67 has also been supported in international comparison studies, no consumer input into the Model has  
68 occurred to date. The aim of the present study was to address the lack of consumer-led direction for  
69 strategies to (re)build and maintain consumer trust during and following a food incident by both  
70 eliciting consumer strategies and determining how well the Model aligns with consumer views. The  
71 objectives therefore were to (1) determine the strategies consumers see as important to support  
72 their trust in the management of a food incident, and (2) critique the Model using these.

## 73 2. Methods

### 74 2.1. Study design

75 This qualitative public deliberation study involved consumers participating in a full day (6.5 hours) of  
76 structured democratic deliberation grouped within morning and afternoon sessions (Figure 1), in  
77 May 2018. Participants and the research team were together throughout the day, including sharing  
78 meals, morning and afternoon refreshment breaks. This immersive and intense approach is required  
79 for participants to become acquainted and comfortable with each other, the content, the process of  
80 a public deliberation and the researchers (Degeling et al., 2015; O'Doherty et al., 2012; Thomas et  
81 al., 2017).

82 The morning vignette discussion session (Figure 1) involved participants being presented with  
83 experimental, developmental vignettes for group discussion. Vignettes are narrative scenarios  
84 presented to research participants to contextualise their responses in a research study (Grønhoj &  
85 Bech-Larsen, 2010; Jenkins et al., 2010). They unfolded in a series of 3 stages, providing further  
86 information and context about the scenarios as the morning progressed. Vignettes were used here  
87 to situate the deliberations within a food incident scenario, and orient participants to previous food

88 incidents they had personally experienced. Participants were organised into two groups that  
89 conducted the day's activities concurrently in separate rooms to enable the presentation of two  
90 different vignettes (further described in 'Data collection'). Experimental manipulation of the details  
91 of vignettes is commonly used to determine the impact on the social behaviours described by  
92 participants (Grønhoj & Bech-Larsen, 2010), and was used here to explore whether different and  
93 contrasting food incident conditions impacted the key strategies thought by participants to support  
94 consumer trust in the food system during a food incident. The first session culminated in participants  
95 achieving consensus on a collated and ranked list of key strategies to be used by food system actors  
96 during a food incident to assist in maintaining consumer trust. This was done in order to preserve  
97 the power of the participants to constitute and elucidate their own strategies, rather than have  
98 researchers determine these after the fact based on transcripts. This is of central importance to the  
99 democratic method employed (Degeling et al., 2015; O'Doherty et al., 2012; Thomas et al., 2017). In  
100 the Model discussion session, participants were introduced to the Model developed by Wilson et al.  
101 (2016) mentioned above. Afternoon deliberations then focused on comparing the ranked lists of  
102 strategies developed in the morning session with, and critiquing, the Model.

103

104 Insert: **Figure 1. Study components in chronological order** about here

105

## 106 2.2. Data collection

107 The two food incident vignettes comprised three stages (Appendix A). Each outlined a series of  
108 events relating to a food safety incident involving black pepper, and were structured as follows: a  
109 vague introduction to the incident, a second part with extensive detail about the responses of food  
110 system actors, and a third part describing the resolution of the food incident. Group 1 received a  
111 vignette where the actions of the organisations named in the scenario were based on the Model;  
112 that is, the Group 1 vignette outlined a food incident where all food system actors conducted a 'best  
113 practice' response according to the Model. In the Group 2 vignette, food system actors behaved in  
114 the opposite way; that is, their response was the opposite of best practice according to the Model.  
115 The vignettes were developed by the research team in collaboration with a food regulatory agency  
116 to ensure both vignettes were realistic. Contaminated black pepper was chosen for the vignettes  
117 because it is widely consumed in the Australian community as an ingredient in many food products  
118 and at the table-top. Consumers from a wide diversity of cultural, religious and socio-economic  
119 groups eat black pepper making it relevant to all study participants.

120 All deliberations were facilitated by the same senior researcher for each group (JC and PW). This  
121 involved guiding the groups' discussion toward the study areas of interest, detailing instructions for  
122 the group tasks, as well as ensuring inclusive group dynamics made possible by the immersive  
123 environment. During the vignette deliberation session participants were presented with each stage  
124 of the vignette and asked to discuss their feelings and response in terms of who they would be  
125 looking to for information, and what information they would be seeking, their expectations of the  
126 people they identify as part of the management of the incident, as well as their own consumer  
127 behaviour in relation to the incident (see discussion schedule in Appendix A). Participants were then  
128 asked to individually write down on Post-It notes the actions/expectations (strategies) of food  
129 system actors they saw as most important to help maintain their trust given the food incident  
130 scenario. Strategies on Post-It notes were collated into similar concepts by the researchers during  
131 the morning tea break, and this was conducted in the same room and in full view of the participants.  
132 Each group then reviewed, debated and revised these groupings, and gave each concept group a

133 name agreed upon as representative by the group (for example, 'transparency'). Finally, the  
134 concepts were then explicitly defined and ranked in order of importance. There was no limit placed  
135 on the number of strategies. Thus at the end of the vignette discussion session both groups had a  
136 ranked list of key strategies for food system actors during a food incident to support consumer trust,  
137 in the same format as that in the Model.

138 The Model discussion session began with a comprehensive presentation of the Model from the  
139 researcher co-ordinating its development (AW). This presentation was intentionally left until after  
140 the participants had developed their own ranked list of key strategies so as not to influence  
141 participants' responses. Preserving the original two groups, through facilitated deliberation  
142 participants then compared the 10 strategies within the Model with their own ranked list by merging  
143 strategies they considered similar under the same heading (hereafter we refer to this process as  
144 'mapping'). Put simply, they matched strategies they thought generally had the same meaning. For  
145 example, Group 1 had a strategy they called 'openness and transparency' which they considered  
146 closely matched in meaning and scope the 'be transparent' strategy from the Model, and therefore  
147 mapped 'openness and transparency' to 'be transparent' (in Table 2 this is graphically presented  
148 using a solid line connecting the strategies from each list, presented below). Similarly, Group 2  
149 concluded that taken together their two strategies of 'independent oversight' and 'information' had  
150 similar intent and actions to the Model strategy of 'be credible', therefore mapped these. Any  
151 strategies that were not mapped to the Model, or widely differing descriptions of mapped  
152 strategies, were then discussed in terms of a critique of the Model.

### 153 2.3. Sampling and recruitment

154 Participants were recruited using purposive, theoretical, stratified sampling through a market  
155 research company. This method prioritises sampling that reflects the diversity of the population of  
156 interest, rather than representativeness (Barbour, 2007), which is appropriate for deliberative  
157 democratic methods (O'Doherty, 2017). Adults older than 18 years from Adelaide, South Australia  
158 were invited to participate from a database of approximately 20,000 respondents. Stratification was  
159 used to ensure balanced sampling of a number of factors known to impact trust in the food system  
160 including: food market preferences (supermarket shoppers, organic/specialty store shoppers,  
161 farmer's market/own produce shoppers) (Ekici, 2004; Tonkin et al., 2016), age, gender,  
162 socioeconomic status (by suburb), country of birth (Australia/international), occupation and  
163 household makeup (single no children, couple no children in home, family with children under/over  
164 12) (Henderson et al., 2011; Holmberg et al., 2010; Poppe & Kjaernes, 2003; A. Taylor et al., 2012; A.  
165 W. Taylor et al., 2012). Additional recruitment was conducted at an organic market using flyers to  
166 fulfil unmet sampling dimensions. Participants were placed into two groups for the day's activities  
167 using the same sampling dimensions, as having two groups with similar participant composition is  
168 thought to ensure data features are not simply those of a one-off group (Barbour, 2007; Scott &  
169 Garner, 2013). Additionally, having participants with different opinions in the group, and thus some  
170 disagreement in discussion, typically encourages participants to provide depth in their justification  
171 for their opinions enabling greater clarity on their perspectives (Barbour, 2007). All participants  
172 provided informed consent and were reimbursed \$100 for expenses associated with participating.  
173 The recruitment target for this study was 16 participants, 8 per group, as this is generally considered  
174 the maximum number of participants for a group while still enabling depth in data collection and  
175 analysis (Barbour, 2007; Scott & Garner, 2013). Ethics approval was granted by the Flinders  
176 University Social and Behavioural Research Ethics Committee (SBREC7567).



## 177 2.4. Analysis

178 All materials resulting from the day's activities were used in the analysis, including: audio recordings  
 179 of all group discussions, transcribed verbatim; each group's ranked list of strategies; the butchers  
 180 paper groupings of each individual participant's identified strategies; and the researchers' own notes  
 181 from the day. Analysis initially focused on comparing the outputs from each group (the ranked list of  
 182 strategies and description of each strategy) with the Model to determine how well it aligned with  
 183 consumer views. The first part of this comparison was of course part of data collection, and  
 184 therefore participant led. However, the Model presented to participants was not in ranked order of  
 185 importance. Therefore, to enable comparisons of strategy rank, the Model strategies were ranked in  
 186 order of the 'average ranking following a food incident' approach used in the original paper, and  
 187 where scores were the same, they were ordered based on highest percentage agreement (Table 2,  
 188 p7, Wilson et al., 2016). This method of ranking the Model strategies was chosen as it most closely  
 189 matched what participants in the present study were asked to do during deliberations. Similarities  
 190 and differences were identified, and transcripts and researcher notes were then interrogated to  
 191 draw out further context for, and any implications of, inconsistencies. Transcripts were also openly  
 192 coded to accommodate any additional themes raised by consumers which were not captured in the  
 193 final outputs. The method of data collection enabled the participants themselves to map and  
 194 compare their strategies to those of the Model, therefore the results presented here were  
 195 thoroughly participant led and their presentation member-checked by participants, ensuring  
 196 credibility and authenticity (Nicholls, 2009).

## 197 3. Results

### 198 3.1. Participant characteristics

199 Fourteen of the 15 participants recruited through the market research company, and one additional  
 200 participant from the organic market recruitment attended both deliberation sessions on the day  
 201 (Table 1).

202

---

203 Insert **Table 1. Characteristics of participants attending all sessions of the study, by group** here

---

204

### 205 3.2. Participants' overall response to the vignettes

206 In their response to vignette part 1 which opened the group deliberations, Groups 1 and 2 identified  
 207 industry (growers, suppliers, manufacturers, retailers and food outlets such as restaurants),  
 208 regulators (generally termed 'the health department', 'SA health' or 'Food Standards Australia') and  
 209 the media as key actors in a food incident, prior to any mention of these actors from researchers. In  
 210 addition, participants in Group 1 thought hospitals were an important stakeholder in identifying the  
 211 cause of the food incident.

212 It was clear from participants' responses to the complete vignettes that the two vignettes elicited  
 213 different trust reactions from the participants. The vignette based on the Model was highly  
 214 consistent with consumer expectations, while the other vignette violated these expectations. For  
 215 example, a Group 1 (best-practice scenario) participant in response to vignette part 2 said,

216 *I think what has happened is what should happen. It's pretty consistent in terms*  
 217 *of what needs to be provided. (Michael)*

218 While a Group 2 (non-best-practice scenario) participant response to vignette part 2 was,

219 *But I'm serious, if we are taking the whole scenario as one thing there are a lot of*  
 220 *conflicting issues which would bring about distrust in the company...And then I'll*  
 221 *blame [government organisation] because they should be testing before it's*  
 222 *brought to the consumers. So it means there's something that the government*  
 223 *didn't do, there's a step that wasn't followed. So for me if you take the whole*  
 224 *statement, the scenario on the whole I would basically think about sacking my*  
 225 *pepper. (Andrew)*

### 226 3.3. Consumers' ranked strategies mapped to the Model

227 Participants identified the key actions or expectations of food system actors they felt would be  
 228 required for their trust to be maintained in the event of a food incident, gave them a single name  
 229 (hereafter referred to as 'strategy'), ranked their listed strategies, and mapped them to the Model.  
 230 Each ranked list is shown in Table 2, as well as how the participants mapped their strategies to the  
 231 Model.

232 \_\_\_\_\_

233 Insert **Table 2** about here

234 \_\_\_\_\_

235 Transparency was independently ranked the number 1 strategy by Groups 1 and 2, and in the  
 236 Model. Both Groups 1 and 2 also saw some repetition in the Model strategies of 'be credible' and  
 237 'build your reputation'. Eight of the 11 strategies identified by Group 1 (best practice vignette) were  
 238 thought by participants to be captured within the top 5 strategies of the Model (Table 2). The  
 239 strategies 'be transparent', 'be credible' and 'have protocols and procedures in place' mapped  
 240 directly to Group 1 strategies that participants felt were equivalent and also ranked in the same  
 241 position. All of the 10 strategies identified by Group 2 ('non-best practice' vignette) were thought by  
 242 participants to be captured within the top 5 strategies of the Model (Table 2). The strategies  
 243 'be transparent', 'be credible' and 'put consumers first' mapped directly to Group 2 strategies that  
 244 participants felt were equivalent and also ranked in the same position. Therefore, the top 5  
 245 strategies within the Model were thought by participants to capture 8/11 (Group 1) and 10/10  
 246 (Group 2) strategies they independently identified as important for (re)building or maintaining  
 247 consumer trust in the food system in the event of a food incident, with many strategies mapping  
 248 directly to equivalently ranked strategies within the Model.

### 249 3.4. Consumers' detailed critique of the description of the Model strategies

#### 250 3.4.1. Be transparent

251 Group 1 mapped their strategy 'Openness and transparency' and Group 2 mapped 'Transparency' to  
 252 the Model's 'Be transparent' (Table 2). The Model and both Groups 1 and 2 defined these  
 253 strategies as transparency in food system actor actions in investigating and managing a food  
 254 incident. Both Groups 1 and 2 expanded the definition of transparency provided in the Model  
 255 however, particularly in relation to the media. Consumers emphasised the need for accuracy in all  
 256 aspects of reporting, and Group 2 intertwined being transparent with being proactive for the media,

257 *That's my point, being transparent doesn't just mean whatever someone hands it*  
 258 *over you just accept it and pass it on. You have to do your own research and*  
 259 *whatever you find out you give to the public and that means transparency.*  
 260 *(Andrew)*

261 Consumers were also sceptical as to whether industry 'know what consumers mean by  
 262 transparency...full disclosure' (Group 2 ranking table) including honesty about vested interests and

263 processes involved for industry when managing a food incident (for example cost-benefit analyses  
264 for recalls).

265 *I'd want to see information that said we have consulted our lawyers and our*  
266 *economists and our whatsit and we have formed this view. (Simon)*

267 Both groups also discussed transparency in relation to regulatory documents detailing procedures  
268 and protocols for food incidents being freely and easily accessible. Finally, Group 1 were also seeking  
269 transparency from point-of-sale retailers,

270 *I think where you purchased that produce from has a responsibility to tell you*  
271 *[about food incidents]...But they probably don't want to do that because then*  
272 *people are going to do exactly what I did, "Oh, I might not eat rockmelon this*  
273 *week," and then they lose money too. (Jemima)*

274 3.4.2. Be proactive

275 Group 1 mapped their two strategies 'Information' and 'Taking responsibility', and Group 2 mapped  
276 'Communicating during the incident' and 'Expect companies to take responsibility and fix the issue'  
277 to the Model's 'Be Proactive' (Table 2**Table 2**). For both Groups 1 and 2 being proactive meant all  
278 food system actors providing information about a food incident to consumers quickly and in full.  
279 Both groups specifically stated this needed to include information about the symptoms of the illness  
280 caused by the food. This represented a narrower description for the media and regulators, and a  
281 slightly expanded description for industry compared to that presented in the Model. A critical part of  
282 being proactive as seen by consumers was that food industry take responsibility for the incident, and  
283 industry and regulators describe why it occurred, and how it will be prevented in future.

284 *I think – just to follow what you just said there should be more proactive in that,*  
285 *that the one who are bringing out the communication, I would like if such an*  
286 *incident happened, I'd like maybe six months from now, the government come*  
287 *out and say 'we actually have done this and this and this', not just put it in a*  
288 *report somewhere.... (Andrew)*

289 It was important to consumers that industry should not wait to be 'found out' by the media, but take  
290 initiative and voluntarily come forward to communicate all facets of the incident with consumers,

291 *I do think, like using the Garibaldi example, because they were very actively*  
292 *involved in that and they seemed to be very open and very honest about what*  
293 *was going on, and I think that was an excellent response on their part. They knew*  
294 *the damage that was happening, but they dealt with that. (Michael)*

295 Finally, Group 2 identified that one-way regulators could be proactive was informing consumers  
296 about existing food regulation and how it operates,

297 *I think that as a proactive way, 'cause you're going to have the regulation, but if*  
298 *the governments are actually doing what they're doing and they're showing us*  
299 *that's a proactive way of us accepting that they're actually doing what they're*  
300 *saying. (Andrew)*

301 3.4.3. Be credible

302 Group 1 mapped their strategies 'Statements from relevant health governing body' and  
303 'Information', and Group 2 mapped 'Independent oversight' and 'Information' to the Model's 'Be  
304 Credible' (Table 2**Table 2**). With a greater focus on the type of information provided than in the  
305 description in the Model, both Groups 1 and 2 related the 'be credible' strategy to their own  
306 strategies about providing 'accurate, reliable, testable, easier to access, timely' (Group 2 strategy list  
307 document) and 'evidence based...plain and simple' (Group 1 strategy list document) information to

308 consumers during a food incident. Importantly, and consistent with the Model, both groups also  
 309 identified the need for information to be either validated or provided by a trusted, *independent*  
 310 body, providing examples like chief medical officers or hospitals. Group 2 specifically identified 'not  
 311 just the media/industry/regulators' (Group 2 strategy list document), while SA Health were seen as a  
 312 credible organisation for Group 1. Not only did an independent body need to be involved in  
 313 communication, but in all parts of the incident investigation and management,

314 *Jemima: Because they have a business and if they can make another*  
 315 *shortcut around it or make it not look as bad as it truly is, I think there's someone*  
 316 *else that needs to be the voice of reason in there.*

317 *Brenda: Independent.*

318 Both groups also emphasised the importance of the timeline of the incident and when information is  
 319 provided to consumers impacting on the credibility of organisations involved,

320 *And if this is happening 48 hours after the initial report well understandably we*  
 321 *don't have enough information but if this is a month down the track it's like 'hang*  
 322 *on a second, SA Health you're not doing your job'. So it's a time thing. (Peter)*

#### 323 3.4.4. Put consumers first

324 Group 1 mapped their strategy 'Recall', and Group 2 mapped 'Consumer education and critical  
 325 awareness' to the Model's 'Put consumers first' (Table 2**Table 2**). For both Groups 1 and 2 food  
 326 system actors could demonstrate that consumers are the priority by implementing the earlier  
 327 strategies as defined by them; that is, by providing timely, consistent and comprehensive  
 328 information regardless of its impact on reputation.

329 Conservative actions that may result in loss of income/reputation for industry were also mentioned  
 330 by both groups, such as early recalls and 'naming and shaming' industry performing poorly in routine  
 331 regulatory investigations.

332 *Aaron: Yeah. And I suppose I'd expect them to be conservative, that it's*  
 333 *better that they throw away twice as much food then perhaps was necessary.*

334 *Shane: More than needed, yeah.*

335 *Aaron: Rather than have people get sick, type of thing.*

#### 336 3.4.5. Have protocols and procedures in place

337 Group 1 mapped their three strategies 'Investigation', 'Systems in place' and 'Evaluation', and Group  
 338 2 mapped their four strategies 'Testing', 'Action in the wake of an incident', 'Protocols/procedures in  
 339 place' and 'Identifying the source of the incident' to the Model's 'Have protocols and procedures in  
 340 place' (Table 2**Table 2**). This strategy was considered by both Groups 1 and 2 to encompass the  
 341 investigation of the incident (testing, how it occurred), as well as protocols and procedures for  
 342 communicating responses to the incident during and once resolved. Importantly, both groups  
 343 emphasised the need for a demonstrably systematic process in all parts of incident management and  
 344 including options for punitive actions taken in the wake (with an expectation of severe penalties for  
 345 industry found to be deliberately risking public health).

346 Both groups reported that simply knowing that food incident protocols existed and could rapidly be  
 347 implemented would impact positively on trust in the food system,

348 *I like the idea that there is a food incident protocol. I've never considered what*  
 349 *that would be, but I assumed that there would be something like that. It's good to*  
 350 *know that there is, and it seems to have a name. (Mark)*

351 For Groups 1 and 2 this strategy incorporated both having protocols to prevent food incidents, as  
 352 well as those to action systematic investigation of, and responses to, food incidents when they  
 353 occur, which overall is consistent with the definition provided in the Model.

#### 354 3.4.6. Collaborate with stakeholders and be consistent

355 Group 1 mapped their strategy 'Independent oversight' to the Model's 'Collaborate with  
 356 stakeholders' and 'Be consistent', while Group 2 did not feel any of their strategies were like these.  
 357 On face value, both Groups 1 and 2 had reservations about the inclusion of 'Collaborate with  
 358 stakeholders' in the Model. Both groups deliberated at length about whether there is a need for  
 359 relationships between food industry, the media and regulators, and how knowledge of these  
 360 relationships might impact both their trust in the food system generally, as well as information  
 361 received by the public during a food incident. Group 1 ultimately saw their strategies as being  
 362 implemented together and in the sense that a range of stakeholders should work together to  
 363 provide consistent information and to the goal of completing the investigation of a food incident  
 364 quickly; that is, all stakeholders are involved in ensuring information is accurate and all stakeholders  
 365 commenting on the incident provide consistent information for consumers to consider when  
 366 choosing their own actions in response to the incident,

367 *Because I follow social media and all that, SA Health brought out a statement*  
 368 *saying that it's been cleared. Woolworths had a sign saying that these rock*  
 369 *melons have been cleared, you can eat them. And what was the other one? There*  
 370 *was another association that said, yes, you can eat it, as well. (Penny)*

371 This was also discussed as consistency in how separate food incidents are managed, even to the  
 372 point of having a standard location for and presentation of advertised announcements about food  
 373 incidents. Although not explicitly stated, much of the conversation from Group 2 members in  
 374 response to vignette Part 2 revolved around the consistency between public statements and  
 375 organisation's actions, as well as the consistency of information between actors. This description is  
 376 highly consistent with the definitions provided in the Model. As previously mentioned, both groups  
 377 raised concerns regarding vested interests in food regulation, and therefore explicitly expressed this  
 378 strategy would only support consumer trust if there was transparency about food system  
 379 interrelationships, and also that the media was exclusively independent of these.

#### 380 3.4.7. Keep your promises

381 Neither group explicitly identified 'keep your promises' as a key strategy, primarily because they  
 382 thought it was implied by the strategies previously discussed. It was however identified as of critical  
 383 importance for actors to be considered trustworthy;

384 *Facilitator: What would that look like if you were to think, so in my head an*  
 385 *untrustworthy person would exhibit these behaviours or an untrustworthy*  
 386 *organisation would exhibit these behaviours? What would that look like to be*  
 387 *untrustworthy?*

388 *Clarise: Not following through on promises.*

#### 389 3.4.8. Educate stakeholders and/or consumers

390 Group 1 mapped their strategies 'Information' and 'Systems/protocols in place', and Group 2  
 391 mapped 'Consumer education and critical awareness' to the Model's 'Educate stakeholders and/or  
 392 consumers'. While generally finding their definition similar to that of the Model, Group 1 thought  
 393 the implementation of this strategy should be extended to also making consumers aware of the  
 394 protocols and procedures that exist in terms of how food is regulated during both business-as-usual,  
 395 and during a food incident;

396 *Facilitator: So if I'm going to put that into the language that we've been*  
 397 *playing with here, would it say something like, "I would have more trust in food*  
 398 *supply if I had a better understanding of the food system."?"*

399 *Michael: Yeah.*

400 *Facilitator: Is that, you know, not just the incident itself, but the food system.*

401 *Michael: Yes.*

402 *Jemima: Yeah.*

403 *Brenda: And my responsibilities when interacting with the food system.*

404 Group 2 defined this strategy quite differently to both the Model and Group 1, focussing on food  
 405 system actors facilitating consumers to educate themselves and develop a critical awareness of food  
 406 matters,

407 *When you're talking about educating stakeholders and consumers, do you think*  
 408 *the five basic points [referring to the Top 5 ranked Model strategies], if you don't*  
 409 *educate them, then the other five become null and void because you can set up*  
 410 *the protocols and the procedures, but if the consumers don't actually know how*  
 411 *to go about them, how to get - how to put on their views, how to bring it out to*  
 412 *the regulatory bodies, how are they supposed to actually - how are they supposed*  
 413 *to complain or do anything? (Andrew)*

414 3.4.9. Build your reputation

415 Group 1 mapped their three strategies 'Statements from relevant health governing body',  
 416 'Independent oversight' and 'Action in the wake of an incident', and Group 2 mapped their strategy  
 417 'Independent oversight' to the Model's 'Build your reputation'. Both Groups 1 and 2 linked this to  
 418 the previously mentioned strategies within 'be credible', citing that implementing all other strategies  
 419 fully would assist in building a reputation for being trustworthy. The definition provided in the  
 420 Model also heavily features themes around credibility. Both Groups 1 and 2 also discussed 'build  
 421 your reputation' as industry and regulators clearly communicating remedial or punitive actions taken  
 422 in the wake of a food incident.

## 423 4. Discussion

424 Our data strongly supports the conclusion that *timely* transparency is the key strategy for  
 425 maintaining consumer trust during and after a food incident. The other strategies identified by the  
 426 participants were also highly consistent with the Model developed by Wilson et al. (2016); eight of  
 427 the eleven strategies from Group 1, and all 10 Group 2 strategies were mapped by the participants  
 428 to the top five ranked Model strategies. Therefore, the Model in its current form is fundamentally  
 429 supported by consumer opinion. Despite the groups receiving very different vignettes to  
 430 contextualise their deliberations and having different trust reactions to these, the findings  
 431 demonstrate broad consistency between groups and with the Model in the descriptions of the  
 432 strategies they identified as key for maintaining consumer trust during a food incident, albeit with  
 433 some differences in emphasis. This suggests that different food incident conditions do not appear to  
 434 affect the types of strategies thought to be beneficial by consumers to (re)build or maintain their  
 435 trust during, and following a food incident

436 The value placed by consumers on timely transparency and its importance during a food incident  
 437 found here echoes that reported by Barnett et al. (2016) in their study of consumer responses to the  
 438 horsemeat scandal in the UK. Participants in both studies also suggested tougher penalties and  
 439 accountability, and greater information sharing with consumers to be strategies supporting  
 440 consumer trust (Barnett et al., 2016). These strategies, and many others identified by participants in  
 441 the present study, are congruous with best-practice risk communication literature. For example, in

442 their 'core risk communication strategy' Charlebois and Summan (2015) include openness,  
443 transparency, independence, and timeliness/responsiveness as key. This importantly includes  
444 transparency and timely communication with consumers in circumstances of uncertainty as stressed  
445 by both participants in the present study and risk communication literature (Barnett et al., 2016;  
446 Charlebois & Summan, 2015; Cope et al., 2010; van Kleef et al., 2009). These findings support  
447 literature suggesting consumers appear to be willing to tolerate uncertainty about risk if it is  
448 presented transparently and is the most up-to-date information available at the time. However, if  
449 inappropriate food system relationships prevent the public receiving full and accurate, and *timely*  
450 information, consumer trust will be jeopardised (McGloin et al., 2009). Timeliness can be seen from  
451 the findings to permeate many of the strategies, most especially be proactive, transparent and  
452 credible. The same information delivered at different time points was suggested by these  
453 participants to have very different impacts on consumer trust and perceived credibility of system  
454 actors. As such, food system actors would do well to incorporate in food incident management plans  
455 communication strategies prioritising rapid and transparent communication about what is known  
456 about the incident at any timepoint based on best practice risk communication literature.

457 There was a very high degree of consistency in the strategies and descriptions of strategies provided  
458 by consumers and the Model, and therefore perhaps the implication is actors need to *demonstrably*  
459 carry out the strategies. Like others (Cope et al., 2010; van Kleef et al., 2009), our data shows  
460 participants to be sceptical of food system actors' intention in the case of industry and media, or  
461 capacity in the case of regulators, to carry out the strategies, due to inevitable competing priorities  
462 and pressures in their work. However, many of the strategies participants were sceptical about are  
463 already being carried out in Australia unbeknownst to these participants. While the problem of  
464 consumers' sensitivity to industry interests impacting policy and regulation is potentially intractable,  
465 perhaps communicating more effectively, more broadly, and with more depth about how food  
466 regulation works during business-as-usual and during a food incident, with an emphasis on simple  
467 explanations of what regulation exists and how it can be applied, may assist in providing the  
468 education requested by participants in the present study, and therefore in setting realistic consumer  
469 expectations. Similar to these findings, Cope et al. (2010) report consumers seeking information  
470 about the operationalisation of risk in food systems, and Barnett et al. (2016) that consumers seek  
471 tougher penalties and accountability for industry. In communicating about a food incident therefore,  
472 emphasising the existence of pre-planned protocols, the systematic nature of the investigative  
473 process and incident management plan, the steps that will be taken to resolve the matter and what  
474 corrective action is possible is likely to instil public confidence and trust. Indeed our data suggest in  
475 some cases a specific incident does not necessarily result in diminution of trust in the system, but  
476 may well provide an opportunity to demonstrate the preparedness of the system, potentially  
477 contributing to the maintenance of trust in the system overall.

478 The novel method employed in this study sets it apart from previous literature in the area as it  
479 reports true deliberative democratic public opinion; the immersive nature of the process allowed full  
480 participation and engagement. As O'Doherty (2017) states, there is 'no meaningful theoretical  
481 foundation for the construct of public opinion as it is typically measured in surveys, polls, or focus  
482 groups', with true public opinion elicited through deliberative democratic methods. This study  
483 therefore provides data representing genuine public opinion from which the recommendations for  
484 practice have been drawn. While there were fewer participants under the age of 30 who attended  
485 on the day than were recruited, those present were actively drawn into the deliberations by the  
486 facilitators, and the member checking inherent in the design of the study provides further  
487 confidence in the findings. This method of public deliberation could feasibly have numerous

488 applications, including using similar ranking procedures for research priority setting in areas  
489 involving experts as well as consumer groups.

## 490 5. Conclusion

491 We found that public opinion was consistent with the best practice model for food system actors to  
492 use in the event of a food incident to assist with (re)building or maintaining consumer trust (the  
493 Model) proposed by Wilson et al. (2016). If food system actors are to demonstrably carry out the  
494 Model in the event of a food incident, these actions are consistent with those consumers state will  
495 support the maintenance of consumer trust in the food supply. This study could be repeated in other  
496 regions to determine whether the Model is transferrable. The next step in this work in Australia is to  
497 determine whether food system actors do carry out their practice in line with the Model, both  
498 during a food incident and business-as-usual, and whether this does indeed support consumer trust  
499 in the food system.

## 500 References

- 501 Arnot, C. (2011). Building consumer trust in the food system. *Food Technology*, 65(6), 132-132.
- 502 Barbour, R. (2007). *Doing Focus Groups*. London, UK: SAGE Publications.
- 503 Barnett, J., Bejen, F., Howes, S., Regan, A., McConnon, A., Marcu, A., . . . Verbeke, W. (2016).  
504 Consumers' confidence, reflections and response strategies following the horsemeat  
505 incident. *Food Control*, 59, 721-730. doi:<https://doi.org/10.1016/j.foodcont.2015.06.021>
- 506 Bildtgaard, T. (2008). Trust in food in modern and late-modern societies. *Social Science Information*,  
507 47(1), 99-128. doi:10.1177/0539018407085751
- 508 Charlebois, S., & Summan, A. (2015). A risk communication model for food regulatory agencies in  
509 modern society. *Trends in Food Science & Technology*, 45(1), 153-165.  
510 doi:<https://doi.org/10.1016/j.tifs.2015.05.004>
- 511 Cope, S., Frewer, L. J., Houghton, J., Rowe, G., Fischer, A. R. H., & de Jonge, J. (2010). Consumer  
512 perceptions of best practice in food risk communication and management: Implications for  
513 risk analysis policy. *Food Policy*, 35(4), 349-357.  
514 doi:<https://doi.org/10.1016/j.foodpol.2010.04.002>
- 515 Degeling, C., Carter, S., & Rychetnik, L. (2015). Which public and why deliberate? – A scoping review  
516 of public deliberation in public health and health policy research. *Social Science & Medicine*,  
517 131, 114-121. doi:<http://dx.doi.org/10.1016/j.socscimed.2015.03.009>
- 518 Dey, G., & Montet, D. (2017). History of Food Traceability. In *Food Traceability and Authenticity* (pp.  
519 1-30): CRC Press.
- 520 Ekici, A. (2004). Consumer trust and distrust in the food system: Some implications for the debates  
521 on food biotechnologies. In B. E. Kahn & M. F. Luce (Eds.), *Advances in consumer research*  
522 (pp. 555-563). Valdosta: Association for Consumer Research.
- 523 Grønhoj, A., & Bech-Larsen, T. (2010). Using vignettes to study family consumption processes.  
524 *Psychology & Marketing*, 27(5), 445-464. doi:doi:10.1002/mar.20338
- 525 Henderson, J., Coveney, J., Ward, P. R., & Taylor, A. W. (2011). Farmers are the most trusted part of  
526 the Australian food chain: Results from a national survey of consumers. *Australian and New  
527 Zealand Journal of Public Health*, 35(4), 319-324. doi:10.1111/j.1753-6405.2011.00725.x.
- 528 Henderson, J., Ward, P., Coveney, J., & Meyer, S. (2012). Trust in the Australian food supply:  
529 Innocent until proven guilty. *Health, Risk and Society*, 14(3), 257-272.
- 530 Holmberg, L., Coveney, J., Henderson, J., & Meyer, S. (2010). What should primary health care  
531 practitioners know about factors influencing young people's food choices? *Australasian  
532 Medical Journal*, 1(4), 259-266.
- 533 Houghton, J. R., Rowe, G., Frewer, L. J., Van Kleef, E., Chryssochoidis, G., Kehagia, O., . . . Strada, A.  
534 (2008). The quality of food risk management in Europe: Perspectives and priorities. *Food  
535 Policy*, 33(1), 13-26. doi:10.1016/j.foodpol.2007.05.001



- 536 Jacob, C. J., Lok, C., Morley, K., & Powell, D. A. (2011). Government management of two media-  
537 facilitated crises involving dioxin contamination of food. *Public Underst Sci*, 20(2), 261-269.  
538 doi:10.1177/0963662509355737
- 539 Jenkins, N., Bloor, M., Fischer, J., Berney, L., & Neale, J. (2010). Putting it in context: the use of  
540 vignettes in qualitative interviewing. *Qualitative Research*, 10(2), 175-198.  
541 doi:10.1177/1468794109356737
- 542 McGloin, A., Delaney, L., Hudson, E., & Wall, P. (2009). Session 5: Nutrition communication The  
543 challenge of effective food risk communication: Symposium on 'The challenge of translating  
544 nutrition research into public health nutrition'. *Proceedings of the Nutrition Society*, 68(2),  
545 135-141. doi:10.1017/S0029665109001153
- 546 Meyer, S. B., Coveney, J., Henderson, J., Ward, P. R., & Taylor, A. W. (2012). Reconnecting Australian  
547 consumers and producers: Identifying problems of distrust. *Food Policy*, 37(6), 634-640.  
548 doi:10.1016/j.foodpol.2012.07.005
- 549 Nicholls, D. (2009). Qualitative research: Part three - Methods. *International Journal of Therapy and*  
550 *Rehabilitation*, 16(12), 638-647.
- 551 O'Doherty, K., Gauvin, F.-P., Grogan, C., & Friedman, W. (2012). Implementing a Public Deliberative  
552 Forum. *Hastings Center Report*, 42(2), 20-23. doi:doi:10.1002/hast.28
- 553 O'Doherty, K. C. (2017). Deliberative public opinion: Development of a social construct. *History of the*  
554 *Human Sciences*, 30(4), 124-145. doi:10.1177/0952695117722718
- 555 Poppe, C., & Kjaernes, U. (2003). Trust in food in Europe: A comparative analysis. Oslo: National  
556 Institute for Consumer Research.
- 557 Regan, Á., Marcu, A., Shan, L. C., Wall, P., Barnett, J., & McConnon, Á. (2015). Conceptualising  
558 responsibility in the aftermath of the horsemeat adulteration incident: an online study with  
559 Irish and UK consumers. *Health, Risk & Society*, 17(2), 149-167.  
560 doi:10.1080/13698575.2015.1030367
- 561 Regan, Á., Raats, M., Shan, L. C., Wall, P. G., & McConnon, Á. (2016). Risk communication and social  
562 media during food safety crises: a study of stakeholders' opinions in Ireland. *Journal of Risk*  
563 *Research*, 19(1), 119-133.
- 564 Scott, G., & Garner, R. (2013). *Doing Qualitative Research: Designs, Methods, and Techniques*. (1st  
565 ed.). New Jersey, USA: Pearson Education Inc.
- 566 Spink, J., & Moyer, D. (2011). Defining the Public Health Threat of Food Fraud. *Journal of Food*  
567 *Science*, 76(9), R157-R163. doi:doi:10.1111/j.1750-3841.2011.02417.x
- 568 Taylor, A., Coveney, J., Ward, P., Dal Grande, E., Mamerow, L., Henderson, J., & Meyer, S. (2012). The  
569 Australian Food and Trust Survey: Demographic indicators associated with food safety and  
570 quality concerns. *Food Control*, 25(2), 476-483.
- 571 Taylor, A. W., Coveney, J., Ward, P. R., Henderson, J., Meyer, S. B., Pilkington, R., & Gill, T. K. (2012).  
572 Fruit and vegetable consumption - the influence of aspects associated with trust in food and  
573 safety and quality of food. *Public Health Nutrition*, 15(2), 208-217.
- 574 Thomas, R., Sims, R., Degeling, C., Rychetnik, L., Carter, S., Wilson, A., . . . Glasziou, P. (2017). CJCheck  
575 Stage 1: development and testing of a checklist for reporting community injuries -Delphi  
576 process and analysis of studies published 1996-2015. *Health Expectations*, 20, 626-637.
- 577 Thomson, B., Poms, R., & Rose, M. (2012). Incidents and impacts of unwanted chemicals in food and  
578 feeds. *Quality Assurance and Safety of Crops & Foods*, 4(2), 77-92. doi:doi:10.1111/j.1757-  
579 837X.2012.00129.x
- 580 Tonkin, E., Coveney, J., Meyer, S. B., Wilson, A. M., & Webb, T. (2016). Managing uncertainty about  
581 food risks – Consumer use of food labelling. *Appetite*, 107, 242-252.  
582 doi:http://dx.doi.org/10.1016/j.appet.2016.08.015
- 583 Tonkin, E., Wilson, A. M., Coveney, J., Webb, T., & Meyer, S. B. (2015). Trust in and through labelling  
584 – a systematic review and critique. *British Food Journal*, 117(1), 318-338. doi:10.1108/BFJ-  
585 07-2014-0244

- 586 van Kleef, E., Ueland, Ø., Theodoridis, G., Rowe, G., Pfenning, U., Houghton, J., . . . Frewer, L. (2009).  
587 Food risk management quality: Consumer evaluations of past and emerging food safety  
588 incidents. *Health, Risk & Society*, 11(2), 137-163. doi:10.1080/13698570902784265
- 589 Wilson, A. M., Withall, E., Coveney, J., Meyer, S. B., Henderson, J., McCullum, D., . . . Ward, P. R.  
590 (2016). A model for (re)building consumer trust in the food system. *Health Promot Int.*  
591 doi:10.1093/heapro/daw024
- 592 Wynne, B. (2002). Risk and environment as legitimacy discourses of technology: Reflexivity inside  
593 out? *Current Sociology*, 50(3), 459-477.
- 594 Xiu, C., & Klein, K. K. (2010). Melamine in milk products in China: Examining the factors that led to  
595 deliberate use of the contaminant. *Food Policy*, 35(5), 463-470.  
596 doi:<https://doi.org/10.1016/j.foodpol.2010.05.001>
- 597 Yamoah, F., & Yawson, D. (2014). Assessing Supermarket Food Shopper Reaction to Horsemeat  
598 Scandal in the UK. *International Review of Management and Marketing*, 4(2), 98-107.
- 599
- 600

601 **Table 1. Characteristics of participants attending all sessions of the study, by group**

Pseudonym	Gender	Age	Market preference	Country of birth	Household makeup
<i>Group 1, 8 participants</i>					
Shane	Male	30-34	Supermarket	Australia	Family, child <12
Aaron	Male	55-59	Supermarket	Australia	Family, child >12
Penny	Female	18-24	Supermarket	Australia	Single, no children
Brenda	Female	65+	Organic/Specialty	Australia	Couple, adult child
Mark	Male	30-34	Organic/Specialty	Australia	Couple, no children
Athira	Female	40-44	Farmer's markets	International	Single, no children
Michael	Male	65+	Farmer's markets	International	Couple, adult child
Jemima	Female	30-34	Farmer's markets	Australia	Family, child <12
<i>Group 2, 7 participants</i>					
Peter	Male	45-49	Supermarket	Australia	Family, child <12
Janice	Female	45-49	Supermarket	Australia	Family, child >12
Simon	Male	65+	Organic/Specialty	Australia	Couple, adult child
Clarise	Female	40-44	Organic/Specialty	Australia	Family, child <12
Marie	Female	65+	Farmer's markets	International	Couple, adult child
Andrew	Male	30-34	Farmer's markets	International	Single, no children
Rebecca	Female	25-30	Farmer's markets	International	Family, child <12

602

603 **Table 2.** The strategies required to be actioned by food system actors to ensure consumer trust is maintained during and after a food incident determined  
 604 by Groups 1 and 2. Strategies are presented in the order of importance identified by participants (1 = most important). Participants' mapping of their  
 605 strategies to the original top-5 ranked strategies proposed by food system actors in the Model is represented by connecting lines.

Group 1 strategies		'The Model' strategies		Group 2 strategies
1. Openness and transparency		1. Be transparent		1. Transparency
2. Statements from relevant local health governing body		2. Be Proactive		2. Testing
3. Information		3. Be credible		3. Independent oversight
4. Investigation		4. Put consumers first		4. Consumer education and critical awareness
5. Systems in place		5. Have protocols and procedures in place		5. Information
6. Recall		6. Collaborate with stakeholders		6. Communicating responses to the incident
7. Independent oversight		7. Keep your promises		7. Communicating during the incident
8. Action in the wake of an incident		8. Be Consistent		8. Protocols/procedures in place
9. Time passing without incident		9. Educate stakeholders and/or consumers		9. Identifying the source of the incident
10. Evaluation		10. Build your reputation		10. Expect companies to take responsibility and fix the issue
11. Taking responsibility				

606

## Appendix A

### Group 1 vignette and question schedule

#### Part 1

*'You see a news report in SA in the past week that three people have been hospitalised from an illness associated we think with consuming pepper.'*

#### Questions and prompts:

1. Given this session is about trust, what does trust look like to you?
2. What questions would you have about the incident? What would you want to know?
3. Where would you expect to find out more information about this? Who would you be looking to for details?
4. Who are you thinking should be involved in managing this incident? (Both communicating with the public and making sure the contaminated foods are eliminated)
5. What types of things would you be expecting these people to do, if they were to do the *right* thing?
6. What would you personally be doing to manage the risk, if anything?
7. What do you think the best possible outcome for you personally would be?
  - a. If this was managed successfully, what would you be doing in response?

#### Part 2

- *'SA Health states the illness is salmonella, and confirms the Food Incident Protocol has been initiated.*
- *The Chief Medical Officer, Director of Public Health, and food safety information council make statements to the media about testing being done on pepper sauces to identify the source of the salmonella, and that more information will be released as it is available.*
- *SA Health make a statement that the Imported Food Association has worked with them to proactively trace distribution chains and the country of origin of the potentially contaminated pepper.*
- *Industry has stated they will voluntarily recall affected products.*
- *Regular updates are given on the number of cases reported to hospital, patient recovery outcomes, and incident management actions by the same spokesperson from each organisation.*
- *Information is clear and easily understood, released via TV news, radio, newspapers, and online.*
- *Previous incidents have been managed well by the companies involved.*
- *An incident hotline for consumer questions is set up and incident fact sheets are provided and updated.'*

#### Questions and prompts:

1. Let's summarise what's happened.
2. How do you feel about what is happening now?

3. Is there anything more you would want in terms of the management of this situation?
    - a. Is there anything else you would like to know?
  4. What would you personally be doing to manage the risk, if anything?
  5. What would it take for you to feel comfortable eating the affected foods again?
- 

### Part 3

*'One month later the number of hospitalisations is confirmed to be 25 people, all of the relevant food products are identified and recalled, the source is traced and is no longer imported, and it is confirmed that domestic product is not involved.'*

#### **Questions and prompts:**

1. Let's summarise what's happened.
2. How do you feel about what is happening now?
3. Is there anything more you would want in terms of the management of this situation?
  - a. Is there anything else you would like to know?
4. What would you personally be doing to manage the risk, if anything?
5. What would it take for you to feel comfortable eating the affected foods again?

## Group 2 vignette

### Part 1

*'You see a news report in SA in the past week that three people have been hospitalised from an illness associated we think with consuming pepper.'*

**Questions and prompts:**

See Group 1 above.

---

### Part 2

- *'There is a delay in SA Health making a statement and they cannot officially confirm what the illness is, saying "We are not sure what the cause is and we are still investigating".*
- *The media reports industry have taken no action as they await test results.*
- *The media reports that industry are saying they do not believe that pepper is the source of the problem, and companies release statements saying their products are not involved.*
- *Different spokespeople provide information, and industry and health departments issue conflicting information about which products are being recalled in SA, Vic and NSW.*
- *The information released provides lots of technical information about the testing done, but no key messages and is released through radio and newspapers.*
- *Previous incidents have been managed poorly by the companies involved.*
- *Information only becomes available irregularly, and statements are not followed up.*
- *There is no central consumer hotline for questions.*

**Questions and prompts:**

See Group 1 above.

---

### Part 3

*'One month later, the media reports that the illness was salmonella affecting 25 people, but then the reports become less frequent and eventually you hear nothing more about it.'*

**Questions and prompts:**

See Group 1 above.

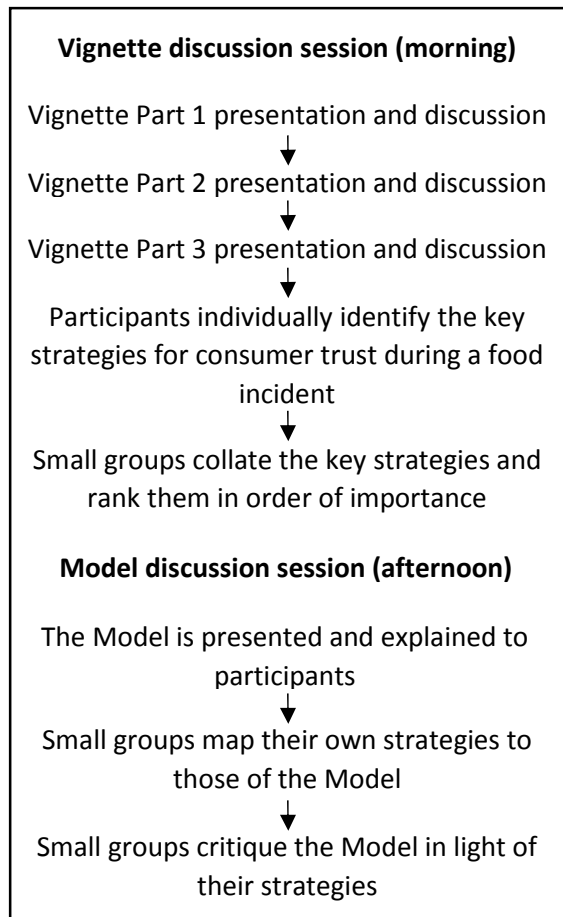


Figure 1. Study components in chronological order



## Highlights

- Timely transparency is the key strategy for consumer trust during a food incident.
- Consumers and food actors propose similar strategies for maintaining consumer trust.
- Consumers express pessimism regarding food actors' ability to implement strategies.