

## Extended Abstract

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<b>Paper/Poster Title</b>	<b>The impact of perceived COVID-19 risks, food waste generation and food purchase control on the food security status during the pandemic.</b>
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<b>Abstract</b>	<i>200 words max</i>
<p>The outbreak of COVID-19 represented an unprecedented global health scenario closely related to food production and consumption. However, COVID-19 radically differed from previous food safety incidents, such as bovine spongiform encephalitis, salmonella, or dioxin contamination. However, its consequences for the food sector are related, such as food supply chain shocks and changes in consumer behaviour. One of the reasons behind the shift in consumer behaviour was the ‘fear of the unknown’ and the amplification of such risks by media coverage. This study aims at understanding how COVID-19 has altered food-related behaviours and food security perceptions among consumers in Scotland. A representative online survey gathered data from Scottish respondents. Structural equation models were employed to analyse the data. Results show that the perception of being food insecure is low. The feeling of control regarding the capacity to decide what food to purchase during covid 19 is very high among respondents which leads to more positive attitudes towards food security. This perception of control is positively defined by trust in institutions and the food sector and negatively by those concerned about the local food sector and the perception of increased food waste generation.</p>	
<b>Keywords</b>	COVID-19, risk perception, food security, food waste, structural equation models
<b>JEL Code</b>	D830; Q180 see: <a href="http://www.aeaweb.org/jel/guide/jel.php?class=Q">www.aeaweb.org/jel/guide/jel.php?class=Q</a> )
<b>Introduction</b>	<i>100 – 250 words</i>
<p>The outbreak of COVID-19 represents an unprecedented global health scenario closely related to food production and consumption. The transmission of COVID-19 through food and food packaging has been declared as very low by WHO, European Food Safety Authority and the British Food Standards Agency. Therefore, the current pandemic radically differs from previous food safety incidents such as bovine spongiform encephalitis, salmonella, or dioxin contamination. However, its consequences for the food sector are related, such as food supply chain shocks and changes in consumer behaviour. One of the reasons behind the shift in consumer behaviour is the ‘fear of the unknown’ and the amplification of such risks by media coverage. Worldwide media has widely reported a rise in demand for food banks and food aid, the disruption of food supply chains, and, with particular importance, the</p>	

virus outbreaks in food factories, farms and meat processing plants. We undertook a literature review on perceptions of risk, uncertainty, and safety to understand food purchase and utilisation during the current situation. Finally, we analysed the impact of factors identified in the literature review, such as consumers' enhanced food safety risk perceptions and distrust towards the stability of the food system as a response to the coronavirus pandemic on the food purchase and consumption behaviour and the potential variation in food waste generation.

### **Methodology**

*100 – 250 words*

First the literature review includes research on past outbreaks of epidemics and pandemics as well as findings from studies on the new coronavirus indicating that the personal trait 'intolerance of uncertainty' can exacerbate emotional and behavioural responses to crises. Second, we collected data using an online survey and collecting 502 respondents. We employed structural equation models (SEM) to analyse the data.

### **Results**

*100 – 250 words*

Through a literature review, we have defined a conceptual model which relates all variables under analysis. The model is based on the theory of planned behaviour; however, it has been adapted to be applied to the current context.

The central focus of the model is the concept of individuals' perception of food insecurity. The literature reports that the perception of risks, in general, impacts individuals' perception of a behaviour or situation. The perception of control towards a behaviour also influences individuals' perceptions and attitudes towards that behaviour. A change in consumption habits has also been reported as modifying the attitudes and perceptions towards food consumption. Also, trust and attitudes toward the supply chain and stakeholders influence the perception of control of our food purchase and consumption.

SEM results show that risk perception regarding covid-19 and an increase in the consumption of comfort food positively and significantly impact the perceived food insecurity status. Furthermore, a higher perception of control towards food purchase and consumption has a negative and significant impact on the perceived food insecurity status. Media influence does have a positive and significant impact on risk perception. At the same time, positive attitudes towards risk and supply chain trust positively and significantly impact the perception of control. However, worries about the impact on the local economy and an increase of food waste generation do have a negative impact on the perception of control towards food purchase and consumption. Furthermore, increase in the consumption of comfort food has also been related positively and significant to an increase in food waste generation. Finally, social norms do have a negative impact on an increase in food waste generation.

### **Discussion and Conclusion**

*100 – 250 words*

Respondents are conscious of the risks of covid 19

They use written media to gather information regarding Covid-19

The feeling of control regarding the capacity to decide what food to purchase during covid 19 is very high among respondents

Respondents do have a high level of trust in public institutions and retailers to protect them from covid 19

Although the perception of being food insecure is low, around 40% of respondents worried at last once about not having enough food or not having enough diversity of food.

Respondents are worried about local food stakeholders / rural economy

Respondents did not reveal changes in their food consumption behaviours towards comfort or convenience food, and neither increase their food waste behaviour.