Exploring Industry Perspectives of Listeria Control in Food Manufacturing.
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Introduction
The persistence of Listeria monocytogenes in food production environments is widely acknowledged and management of the pathogen is complex, particularly for small and medium-sized enterprises (SME) food manufacturers. Despite environmental factors such as the facilities and the hygiene standards of equipment, it has previously been identified as key contributors to the incidence of listeria in food production environments. Therefore, risk management programs must be effective in order to control pathogens in food. There is a need to consider the people factor, that is, to ensure awareness associated with listeria in the food manufacturing industry.

Adapting training and supervision should be provided to assure hygienic practices are accomplished. However, perceptions of employees from senior management enough to food bacteria can impact upon implementation of hygienic practices. Although perceptions of risk, control and responsibility are explored in consumer food safety research, the approach is seldom applied to SME food manufacturers. Listeria monocytogenes is a currently in the industry based data. Furthermore, data detailing managerial perspectives of problems associated with listeria in food manufacturers is lacking. Consequently, this study aims to explore the perceptions of risk, control and responsibility associated with listeria in food manufacturers.

Purpose
The purpose of the study was to explore manufacturers’ perceptions of organisational factors that may influence the control and management of listeria.

Methods
Development of interview schedule: A review of literature relating to listeria in food manufacturers was conducted. A draft schedule was developed, which was refined by new questions and new topics. Final interviews were conducted with managing directors/technical managers from SME food manufacturers. The Food Innovation Wales producers directory was used to identify potential interviewees. From this, 8 interviewees were selected based on geographical location and representativeness of the food industry. Interview transcripts were analysed utilising a thematic analysis approach.

Results
Perceptions of risk associated with listeria
The potential risk of listeria upon the business was widely discussed by interviewees. The industry is seeing more and more outbreaks of listeria and the potential risk of listeria is very real and very significant. Despite this, we are not able to control it. The industry is being very much word of mouth. (Participant 004).

Perceptions of control associated with listeria
Balance in controlling listeria in food manufacturing sites was placed upon having documented control practices. We have a full documented HACCP procedure that is followed and that documents any potential risks and exactly how they should be addressed. (Participant 007).

Perceived responsibility for listeria
It was evident that study participants believed that the control of listeria in industries was everyone’s responsibility. Everyone has a responsibility to a certain degree for anything. (Participant 007).

Conclusions
“Technicians are responsible for making sure that products are kept and stored at the correct temperatures. It’s my responsibility for making sure we have the correct equipment in place. If we’re not doing that correctly and they think they have a potential food crisis then it’s my responsibility.” (Participant 004).

Optimistic bias, illusion of invulnerability, illusion of control, and perceived attribution of responsibility may hinder implementation of effective listeria management.

References

Significance of study
• Given findings relate to ‘the people’; the processes and the infrastructure of manufacturing businesses, there’s a need to consider the potential influence of food safety culture dimensions upon implementation of effective listeria control in food manufacturing.
• Consideration of specific pathogens risks in food manufacturing industry. Consideration of food safety culture dimensions may affect development of highly targeted and effective interventions.
• Cumulatively, the study has identified potential factors, such as optimistic bias, illusion of invulnerability, illusion of control, and perceived attribution of responsibility that can potentiate higher risk of listeria associated with listeria management need be acknowledged and addressed.

Findings suggest some senior managers to have a strong internal locus of control. Significant correlations between optimistic bias and attribution of responsibility which can impact upon behaviour.