

Piloting a Support Program to Enable Small and Medium Sized Food Manufacturing Businesses in Wales to Obtain Food Safety Certification.

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Introduction

To enable growth of the food-sector in Wales, the Welsh Government has recognized there is a need to support small food-manufacturing businesses to obtain food-safety certification¹. SALSA (Safe and Local Supplier Audit) is a robust and effective food-safety certification scheme appropriate for smaller food-manufacturers, which is seen as a precursor to obtaining more complex, international-certification such as BRC (British Retail Consortium). Previous research has identified the barriers for Welsh businesses to obtain food-safety certification² as “knowledge and skills;” “time, cost and resources;” and “access to information.” Consequently, the Welsh Government wants to determine the most appropriate way to support food-manufacturers/processors in Wales to overcome barriers and obtain food-safety certification.

Purpose

To design, develop and pilot a bespoke support-program for small food-manufacturing businesses in Wales to obtain food-safety certification.

Method

A support program was designed to overcome identified barriers by addressing three areas: “knowledge and skills development,” “accessing financial support,” and “improving information and communication.” The program consisted of six support-mechanisms (fig 1-4): (i) self-assessment tool, (ii) internal systems review, (iii) “audit-ready” workshop, (iv) pre-audit factory inspection, (v) post-audit support, and (vi) audit-fee contribution. Welsh food-manufacturers (n = 62) expressed an interest in joining the support-program; eligible businesses (n = 9) joined the program.

Fig 1. Self assessment tool

Topic area	Question	Responses						
		Yes			No			
Accreditation	Is the business registered with EH07?	0	1	2	3	4	5	
	What is your EH07 Food Hygiene Rating Score? (0-5)	pending approval						
	Is the business SALSA Accredited?	Yes, Full SALSA accreditation in place	Working towards accreditation. Audit not yet booked	Not currently working towards accreditation. Interested	Not interested in SALSA accreditation			
	Please indicate with an (x) which of the following product categories you feel your company fits best into	e.g. Raw Meat - Chilled/frozen, bakery, dairy						
	How many staff full time equivalents do you currently employ?	Micro (<10)	Small (<50)	Medium Sized (<250)	Large (>250), or part of a group)			
	Who is responsible for implementing SALSA on site?	Name			Job title			
HACCP	Does the company have a fully implemented and effective food safety plan based on Code Alimentarius HACCP principles?	Fully implemented	Partially implemented	Not currently in place				
	Please confirm the total number of HACCP plans in place (e.g. family of products with similar hazards and similar production technology)	0	1 to 3	4 to 7	7 or more			

Fig 2. Internal System Review

Ref	Standard Requirement	Details of Conformance / Non-Conformance	F/C	P/C	N/C	Corrective Action Required (Please refer to the Corrective Action Plan for details of implementation)
1.2.1	Protective clothing shall be suitable for the food being handled and shall not pose a contamination risk to the product. Disposable protective clothing, if used, shall be subject to adequate control to prevent cross-contamination.					
1.2.2	Where protective clothing is required, designated changing facilities shall be provided for all personnel, whether staff, visitor or contractor, prior to entry to all food handling areas. Protective clothing shall be stored physically separate from outdoor clothing.					

Fig 3. Audit ready workshop

Agenda

- ‘Overcoming Barriers to Accreditation’ Research Update
- How to access the SALSA audit standard, guidance notes, tools and tips
- Discuss the audit process, including:
 - Opening and closing meeting
 - SALSA Audit and Factory Inspection
 - Corrective Action
 - Audit report and certificate
- Closing Non-conformances
- SALSA Issue 5
- Q&A session
- Lunch and networking

Fig 4. Factory inspection checklist

BTA 2 Factory inspection checklist		Observations / comments
Company name		
Date of factory inspection		
Production witnessed		
Staff changing facilities (1.2.2)	<ul style="list-style-type: none"> - Designated changing facility - PPE storage segregated from outdoor clothing - PPE not stored in toilet cubicle 	
Meat species control (1.4.2)	- Different meat species are segregated and labelled during storage	
Allergen control (1.4.3)	<ul style="list-style-type: none"> - Segregated storage - Labelling of raw materials - Dedicated equipment 	

Results

Table 1.0 Difference between self - assessment and post support mechanisms

The attitudes and awareness of businesses regarding the requirements of the SALSA standard and towards the support mechanisms were assessed after the implementation of each mechanism, significant improvements in attitudes and awareness were found, detailed in Table 1.0.

The Understanding of potential gaps within the food safety system increased from pre intervention (0%) following the audit ready workshop (57%) and the pre – audit inspection (67%).

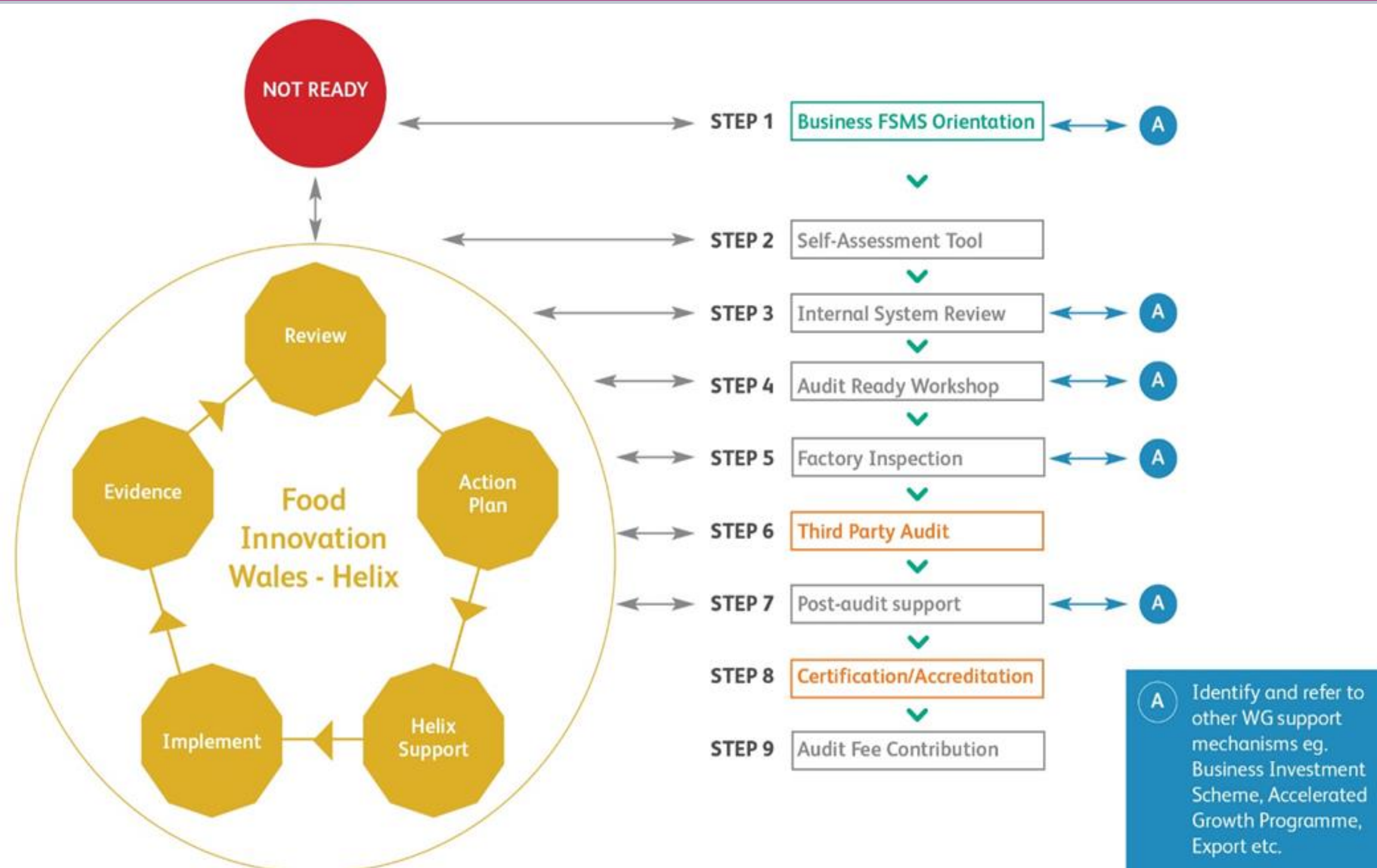
Similarly, an increase in understanding the process of booking an audit and following an internal system review (from 0% to 83%).

The perception of the business having sufficient in house knowledge to implement SALSA Increased from 0% pre intervention to 38% following the internal system review and 67% post pre- audit inspection.

Having access to information and knowledge to implement the SALSA standard increased significantly following interventions 1 -4.

Attitudinal statements	Mechanism 1 Self-Assessment	Difference between self -assessment and after each support mechanism					Mechanism 6 Audit cost contribution
		Mechanism 2 Internal system review	Mechanism 3 Audit ready workshop	Mechanism 4 Pre-audit inspection	Mechanism 5 Post-audit support		
The business has a good understanding of potential gaps within the existing food safety system	0% Strongly agree	p>0.05	57% Strongly agree z = -2.000, n = 7, p = 0.046, r = 0.5 (large effect)	67% Strongly agree z = -2.000, n = 7, p = 0.046, r = 0.5 (large effect)	p>0.05	p>0.05	
I thoroughly understand the process of booking a SALSA audit	0% Strongly agree	33% strongly agree z = -2.232, n = 8, p = 0.026, r = 0.6 (large effect)	57% Strongly agree z = -2.251, n = 7, p = 0.024, r = 0.6 (large effect)	83% Strongly agree z = -2.232, n = 8, p = 0.026, r = 0.6 (large effect)	p>0.05	p>0.05	
The business has sufficient in-house knowledge to implement SALSA	9% Strongly agree	33% strongly agree z = -2.070, n = 8, p = 0.038, r = 0.5 (large effect)	p>0.05	67% Strongly agree z = -2.070, n = 8, p = 0.038, r = 0.5 (large effect)	p>0.05	p>0.05	
The business has sufficient in-house skills to implement SALSA	9% Strongly agree	50% strongly agree z = -2.000, n = 8, p = 0.046, r = 0.5 (large effect)	p>0.05	67% Strongly agree z = -2.000, n = 8, p = 0.046, r = 0.5 (large effect)	p>0.05	p>0.05	
I have access to sufficient information to implement SALSA	0% Strongly agree	17% strongly agree z = -2.271, n = 8, p = 0.023, r = 0.6 (large effect)	43% Strongly agree z = -2.121, n = 7, p = 0.034, r = 0.5 (large effect)	67% Strongly agree z = -2.271, n = 8, p = 0.023, r = 0.6 (large effect)	p>0.05	p>0.05	

Fig 5. Flow diagram depicting the mechanisms within the support package and the relationship with Food Innovation Wales’ Helix Project and other Welsh Government business support interventions.



Significance of study

This pilot study has successfully designed, developed, delivered and evaluated a support-program (Fig. 5) that has resulted in 100% of small food-manufacturing businesses that completed the support-program obtaining food-safety certification. Launch of the holistic support-program will assist to accelerate food-industry sector growth in-line with Welsh Government aspirations.

References

1. Welsh Government. Towards Sustainable Growth: An Action Plan for the Food and Drink Industry 2014-2020. WG21564, <http://business.wales.gov.uk/foodanddrink/sites/foodanddrink/files/Images/Action%20Plan%20-%20English.pdf> (2014, accessed 10th December 2015).
2. Evans E, Ellis L, Lacey J, et al. Understanding the barriers to accreditation in the food and drink sector in Wales. A report by the ZERO2FIVE Food Industry Centre for the Welsh Government Food Division. <https://businesswales.gov.wales/foodanddrink/sites/foodanddrink/files/documents/Food%20-%20Research%20-%20Barriers%20to%20Accreditation%20-%20Main%20Report.pdf> (2016, accessed 11th April 2018).