Examining the New SQF Quality Code:
How to Comply by the January Deadline

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alchemy WEBINAR

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Agenda

1. Introducing the new SQF Quality Code

2. SQF Quality Code vs. SQF Food Safety Code

3. Best practices for implementing the SQF Quality Code

4. Resources

5. Q&A

What is your SQF certification status?

- Currently certified at Level 3

- Plan to become certified in SQF Quality

- Plan to stay with just the SQF Food Safety Code

Have you read the SQF Quality Code?

- Yes

- No, not yet

Introducing the New SQF Quality Code
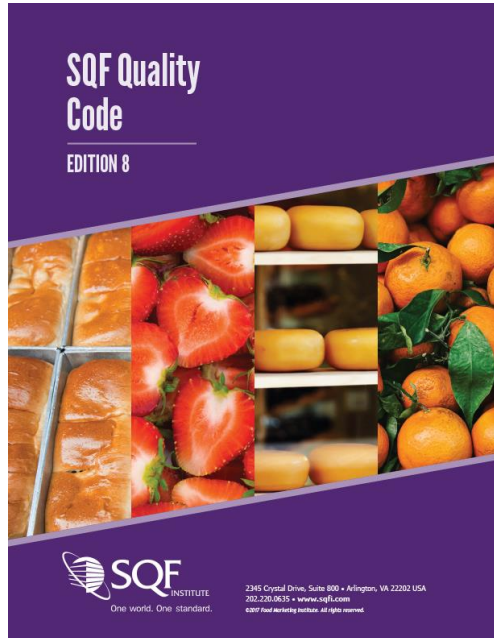
The SQF Quality Code

- Structure & Summary of the SQF Code, edition 8

- Part A: Implementing & Maintaining the SQF Quality Code

- Part B: SQF Quality Code System Elements

Structure of the SQF Codes (Edition 8)

SQF Quality Code Summary

SQF Quality Code
EDITION 8

- Formerly level 3

- Sites must remain certified to the SQF Food Safety Code

- Can be audited as an extension of the food safety audit or stand-alone

- Quality audit is not scored or rated

- Outcome of the quality audit does not affect the score or rating of the food safety audit

Outline of the SQF Quality Code

Part A

1. Preparing for SQF Quality Certification
2. The Initial Quality Certification
3. The Initial Certification Decision
4. Recertification
5. Obligations of Sites & Certification Bodies

System Elements

2.1 Management Commitment

2.2 Document Control & Records

2.3 Specification & Product Development

2.4 Food Quality System

2.5 Food Quality System Verification

2.6 Product Identification, Trace, Withdrawal & Recall

2.7 Food Fraud

2.8 Identity Preserved Foods

2.9 Training

Part A: Implementing and Maintaining the SQF Quality Code

To meet the requirements of the SQF Quality Code, sites shall:

- Be certified to one of the following
  - The SQF Food Safety Code for Primary Production
  - The SQF Food Safety Code for Manufacturing
  - The SQF Food Safety Code for Distribution
  - The SQF Food Safety Code for Packaging

- Apply all additional elements of SQF Quality Code

SQF Quality Practitioner

Senior site management shall designate an SQF Quality Practitioner for each site with responsibility and authority to:

- Oversee the development, implementation, review and maintenance of the SQF Quality System

- Take appropriate action to ensure the integrity of the SQF Quality System

- Communicate to relevant personnel all information essential to ensure the effective implementation and maintenance of the SQF Quality System

- Ensure that site personnel have the required competencies to carry out those functions affecting product quality

SQF Quality Practitioner

System Elements 2.1.2.5

In addition to the SQF Food Safety Code requirements, the SQF Quality Practitioner shall:

- Be competent to implement and maintain HACCP based food quality plans

- Have an understanding of the SQF Quality Code and the requirements to implement and maintain a quality management system

- Be competent in statistical process control (SPC) and/or other quality tools to reduce process variation and drive root cause analysis of non-conformities

2.1 Selection of the Quality Auditor

- SQF Quality Auditors shall be registered as an SQF food safety auditor

- SQF Quality Auditors shall meet one or more of the following:
  - Shall have attended the SQF Quality Auditor training course
  - Shall be credentialed in one of the following: ASQ-CQA, CQE, CQI, CQIA, CQM, Six Sigma
  - Shall have attended a quality training course deemed equivalent by SQFI (e.g. ASQ-CQA, CQE, CQI, CQIA, CQM, Six Sigma – all levels)
  - Have a minimum of sixty hours experience auditing ISO 9001 or equivalent quality management standard

- Shall have completed the SQF Quality auditor online examination

2.4 Audit Duration Guide

SQFI expects a certification audit to the SQF Quality Code, combined with a certification audit to the SQF Food Safety Code to add a minimum of half a day, while a stand-alone quality certification audit will be a minimum of one day.

2.6 System Elements

- There are no mandatory elements

- All applicable elements of the SQF Quality Code shall be assessed as part of the quality system audit

- Where an element is not applicable and appropriately justified, it shall be stated as N/A by the SQF quality auditor in the audit report

2.7 Quality Deviations

- A **minor quality deviation** is an omission or deficiency in the quality system that produces unsatisfactory conditions that if not addressed may lead to a quality threat but not likely to cause a system element breakdown

- A **major quality deviation** is an omission or deficiency in the quality system producing unsatisfactory conditions that carry a significant quality threat and are likely to result in a system element breakdown

- No critical deviations are raised at a quality systems audit

3.2 Site Audit Corrective Actions

- Sites are deemed to have successfully implemented the SQF Quality Code if:

  – The site achieves and maintains SQF Food Safety certification

  – The site closes out all quality deviations within 30 days

- The certification decision shall be made within 45 calendar days of the last day of the quality systems audit.

- The site's unique certification number shall apply to their quality certification

The SQF Quality Shield

- The SQF Quality Shield will appear on the certified site's quality certificate

- Certified sites may also choose to apply the SQF Quality Shield to packaging of certified products or to marketing materials

- The certification body shall provide an electronic copy of the SQF Quality Shield containing the certification body name and site certification number to the certified site on request

- The SQF Quality Shield shall only be used in accordance with the SQF Quality Shield Rules for Use

4.2 Quality Surveillance Audit

- The quality surveillance audit is conducted when the site has two or more major deviations and/or 10 or more minor deviations raised at a certification or recertification audit

- The quality surveillance audit shall be conducted within 30 calendar days either side of the six month anniversary of the last day of the previous certification or re-certification audit

- The site's unique certification number shall apply to their quality certification

(Note that all deviations must be closed out within 30 days to achieve or maintain certification)

The SQF Quality Code Part B (System Elements)

2.1   Management Commitment

2.2   Document Control and Records

2.3   Specification and Product Development

2.4   Food Quality System

2.5   Food Quality System Verification

2.6   Product Identification, Trace, Withdrawal & Recall

2.7   Food Fraud

2.8   Identity Preserved Foods

2.9   Training

2.1 Management Commitment

2.1.1 Quality Policy

2.1.2 Management Responsibility

2.1.3 Management Review

2.1.4 Complaint Management

2.1.5 Crisis Management Planning

2.1.2.2 The senior site management shall develop quality objectives and a process by which quality performance is measured.

2.1.2.7 Senior site management shall develop and implement a quality communication program

2.1.2.9 Senior site management shall establish a process to trend progress in quality performance against agreed measures.

2.1.3.2 The senior site management and SQF Quality Practitioner(s) shall meet to review the implementation and maintenance of the quality system at least monthly.

2.3 Specification & Product Development

2.3.1 Product Development & Realization

2.3.2 Raw and Packaging Materials

2.3.3 Contract Service Providers

2.3.4 Contract Manufacturers

2.3.5 Finished Product Specifications

2.3.1.1 The methods for designing, developing and converting product concepts to commercial realization shall include process capability analysis to ensure that processes are able to consistently supply products that meet customer specifications.

2.3.5.1 Finished product specifications shall be documented, current, approved by the site and their customer, accessible to relevant staff and shall include product quality attributes, service delivery requirements, and labelling and packaging requirements.

Measuring & Controlling Quality Using the HACCP Method

- Where to find HACCP in the SQF Quality Code

- Preliminary steps

- Threat Identification, Threat Analysis & Control Measures

- Quality Threat Analysis

- Risk Analysis matrix for Quality Threat Analysis

- Control measures / interventions

- Identifying CQPs & Critical Limits

- Monitoring & Corrective Actions

- Verification & Documentation

SQF Quality Code vs. SQF Food Safety Code

Safe QUALITY Food

Justification for the use of the **HACCP method** to identify & control quality threats (hazards):

"While the application of HACCP to food safety was considered here, the concept can be applied to other aspects of food quality."

Introduction, Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application , Annex to CAC/RCP 1-1969 (Rev. 4 - 2003), Codex Alimentarius Commission

2.4.3 Food Quality Plan

2.4.3.1

A food quality plan shall be developed, effectively implemented, and maintained in accordance with the Codex Alimentarius Commission HACCP method. The food quality plan may be combined with, or independent from, the food safety plan, but must separately identify quality threats and critical quality points.

2.4.3.2

The food quality plan shall outline the means by which the site controls and assures the quality attributes of the products or product groups and their associated processes.

The Language of HACCP for Quality

SQF Food Safety Codes	SQF Quality Code
Hazard: A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect (Codex)	**Threat:** An identified risk that has the potential, if not controlled, to affect the quality of a product. They do not cause illness.
Non-conformance: A non-compliance raised against an element in one of the SQF Food Safety Codes, classified as either minor, major, or critical	**Deviation:** A non-compliance raised against the SQF Quality Code, classified as either minor or major.

Quality Attributes / Quality Threats

Colour	Incorrect or variable color
Flavour	Incorrect or variable flavor
Texture	Incorrect or variable texture
Consistency	Variable consistency – thin & thick
Formula	Incorrect or variable ingredients
Shape	Incorrect shape. Misshapen
Defects, blemishes	Excess blemishes
	Foreign objects

Quantity	Incorrect number in pack
Integrity	Product damage
Labelling	Underweight or overweight
Packaging	Protection offered by packaging (inner, outer)
	Print quality
	Ease of opening
	Package integrity

Principle 3 (Step 8): Establish Critical Quality Limits

2.4.3.12

For each identified CQP, the food quality team shall identify and document the quality limits that separate acceptable from unacceptable product.

The food quality team shall validate the critical quality limits to ensure the designated level of control of the identified quality threat(s); and that all critical quality limits and control measures individually or in combination effectively provide the level of control required.

Principle 6 (Step 11): Verification Procedures

2.5.4	Product Sampling, Inspection & Analysis
2.5.4.1	Processing parameters or in-process measurements shall be established, validated, and verified at a determined frequency to meet all customer requirements.
2.5.4.2	On-site laboratories and inspection stations shall be equipped and resourced to enable testing of in-process and finished products to meet customer expectations and meet quality objectives.
2.5.4.3	Statistical process control methods shall be used to effectively control and optimize production processes to improve process efficiency and product quality and reduced waste. Control charts shall be in use for control of key processes and have defined upper and lower (process) control limits (+/- 3σ).
2.5.4.4	A sensory evaluation program shall be in place to ensure alignment with agreed customer requirements. Sensory evaluation results shall be communicated with relevant staff and with customers where appropriate.

2.4.4 Approved Supplier Program

Material suppliers shall be selected and approved on the basis of their ability to supply materials that meet quality specifications.

The evaluation program shall require suppliers to:

- Maintain controlled and current copies of specifications

- Have processes that are capable of consistently supplying materials that meet specifications and other defined quality metrics (e.g. delivery, service spec adherence, etc.)

- Be certified to a second or third party quality management system

- Have a complaints and corrective action process in place

2.7 Food Fraud

2.7.11

The food fraud vulnerability assessment shall include the sites' susceptibility to ingredient or product substitution, miss-labelling, dilution and counterfeiting, that could adversely impact food quality

2.7.1.2

A food fraud mitigation plan shall be developed and implemented which specifies the methods by which the identified food fraud vulnerabilities that could adversely impact food quality shall be controlled

2.8 Identity Preserved Foods

2.8.1.1

The methods and responsibility for the identification and processing of food and other products requiring the preservation of their identity preserved status shall be documented and implemented

Examples:

- Kosher
- HALAL
- Organic

- GMO-free
- Regional provenance
- Free from or free trade

POLL

What change in the SQF Quality Code do you think will have the biggest impact?

- More detailed Food Quality Plans

- SPC Requirements

- Food Fraud Quality Assessment

Best Practices for Implementing SQF Quality

SQF Quality Code Implementation Best Practices

- Food Quality Plan Effectiveness

- Identity Preserved Foods Procedures

- SPC Applications

- Other Key Areas for Quality Focus

- Implementation Best Practices

- Resources

Food Quality Plan Effectiveness

- The Food Quality Plan is the most important component of the SQF Quality Code Certification

- It's critical to take time to do a thorough Quality Risk Assessment to properly identify and assess the threats at each step of the process

- Identifying the right Critical Quality Points (CQP's) is essential

- Compliance or Performance? You can have both!!!

- The Food Quality Plan is your opportunity to develop a Quality Process Control system that results in:
    – Improved product consistency
    – Improved product yields
    – Improved customer satisfaction
    – Less rework
    – Less complaints
    – Less non-conforming product

Food Quality Plan Components

- The Food Quality Plan should be similar to the Food Safety Plan format adapted to a quality perspective

- Before starting the quality risk assessment, quality system results for complaints, non-conforming product and corrective actions should be reviewed & trended

- Key Product Specification attributes & COA requirements should drive CQP identification

- Food Quality Plan Components
    - Cover Page with Date & Signature
    - Reassessment Log
    - Product Description
    - Flow Chart
    - Quality Risk Assessment
    - CQP Plan Summary with operational limits, monitoring, corrective action, verification & record keeping
    - Supporting Documentation for the CQP Operating Limits & hazards identified

Risk Assessment Matrix

CONSEQUENCE VS. FREQUENCY	A Common Occurrence	B Known to Occur	C Could Occur (Published)	D Unexpected Occurrence	E Practically Impossible
1. Business Ceases	1	2	4	7	11
2. Product Recall	3	5	8	12	16
3. Rejection of Delivery	6	9	13	17	20
4. Warning Advice	10	14	18	21	23
5. Insignificant	15	19	22	24	25

SEVERITY LEVELS

(1 - 10) HIGH
Significant food quality risk, reasonably likely to occur (CQP)

(11 - 15) MEDIUM
Elevated food quality risk, that potentially could occur (Written PRP)

(16 - 25) LOW
Minor or no food quality risk, not likely to occur

Food Quality Plan Risk Assessment

Risk Assessment Worksheet

Process Step	Principle 1 *Potential Threats to Quality*			Principle 2 *Determine CQP (Critical Quality Point)*				
-	Threat	Cause	Control Measures	Cons.	Freq.	Sig.	CQP/CP	Reason
Receiving	Unwholesome ingredient	Supplier or transport loss of control	Supplier letter of guarantee / ingredient specification	3	D	17	CP	Value > 10

Food Quality Plan CQP Identification

- **Good CQP's**
  - Product Specification
  - Requirements alignment
  - Moisture
  - Water Activity
  - Product Size Dimensions
  - Sensory
  - Color
  - Others as applicable to the product

- **Traditional CQP's**
  - Net Weight
  - Lot Code
  - Package Seals

Do you need to reassess your
Food Quality Plan?

- Yes

- No

- I need to create an effective Food
  Quality Plan

Identity Preserved Foods

- SQF Code Section 2.8 Identity Preserved Food required a written procedure that defines methods of identification and prevention of cross contact

- Raw materials must be properly authenticated

- Storage procedures must prevent possible cross contact and contamination

- Line changeover and sanitation procedures must prevent cross contact

- Finished Product Labeling must be verified to be accurate

- Product Validation must be available in the form of testing results, product specification, Letters of Guarantee and/or COA results

# SPC Applications and Corrective Action Root Cause Analysis

- SQF Quality Code Section 2.1.2.5 iii. requires SPC and Quality Tools be used to reduce variation and drive root cause analysis (RCA) processes

- SQF Quality Code Section 2.5.4.3 requires control charts to be used for key processes to include target limits, upper control and lower limits. Limits must be within 3 standard deviations on each side

- SPC Tools Overview

- SPC Software Options

  - Safety Chain www.safetychain.com

  - Infinity QS www.infinityqs.com

  - MiniTab 17 www.minitab.com

  - Qualtrax www.qualtrax.com

  - Intelex www.intelex.com

SPC for the SQF 8.0 Quality Module
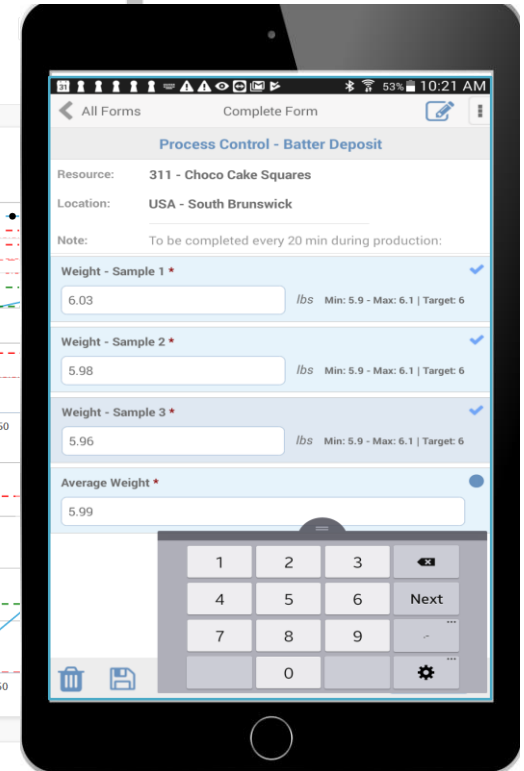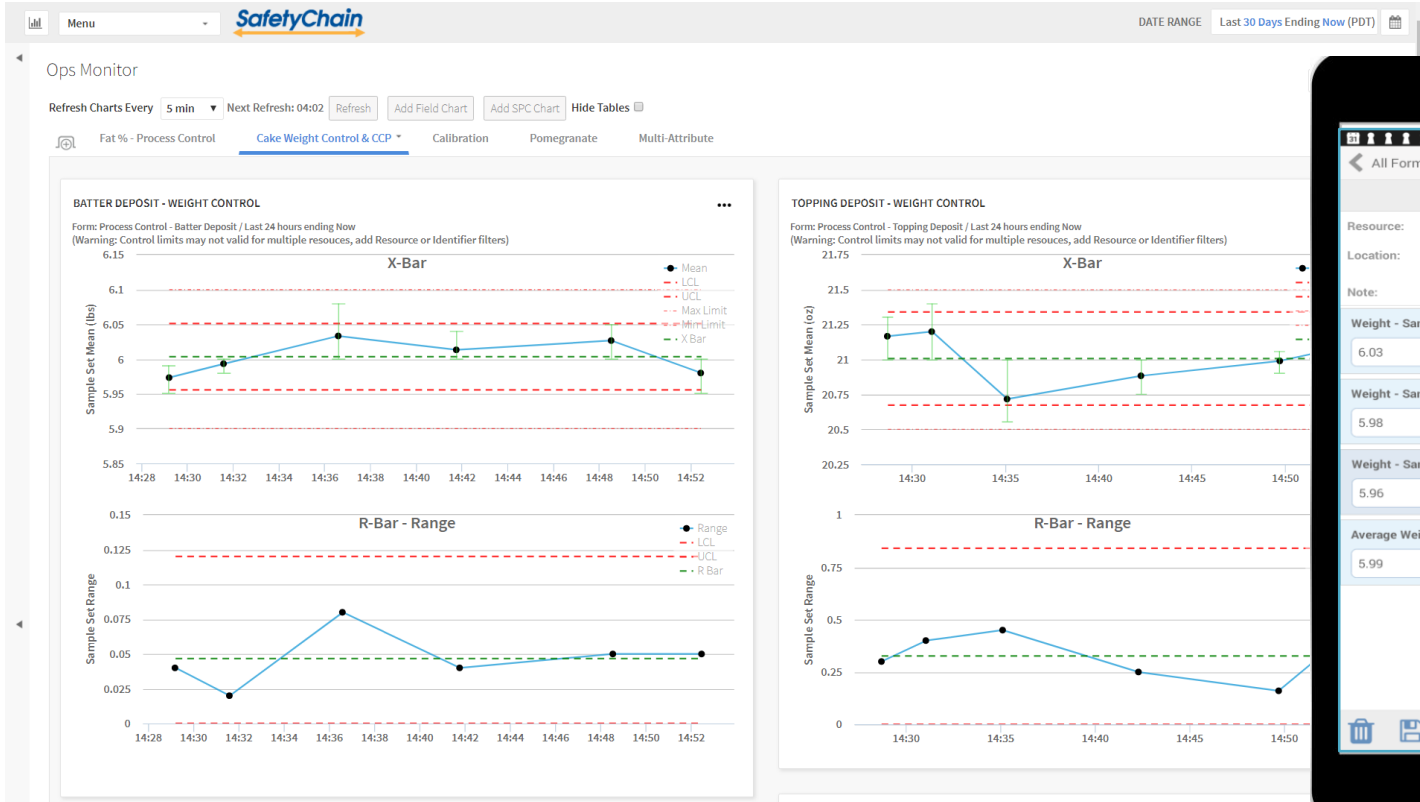
Corrective and Preventive Action Programs (CAPA)

- Corrective and Preventive Action (CAPA) and Root Cause Analysis Tools

- Formal CAPA Training should be taken

- Critical to identify the root cause to implement effective corrective actions

- RCA Tools include methods such as 5 Why, 8D Process, Fishbone Diagram and others
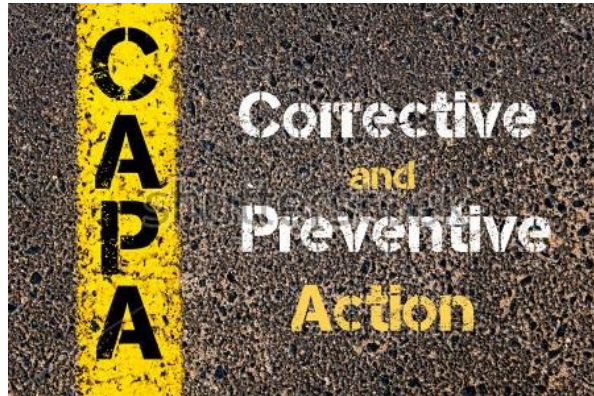
Other Key Areas of Quality Focus

- SQF Policy Statement

- SQF Quality Practitioner

- Product Specifications

- Product Sampling, Inspection & Analysis

- Food Fraud

- CQP Records

Implementation Best Practices

- Take the SQF Quality Code Training Course

- Complete a Gap Analysis to the SQF Quality Code standard

- Develop a great Food Quality Plan

- Follow all Identity Preserved Products procedures

- Implement SPC processes and record keeping requirements

- Comply with all requirements in the SQF Quality Code

- Use a 3rd Party to help with or verify compliance

- Celebrate success! Be fully prepared before January 2, 2018!

Resources

Resources

Documents via the SQFI website

- Change documents

- FAQs

YouTube Video

- Introduction to SQF Code, edition 8 Learning Lunch webinar

SQF CODE, EDITION 8

SQF Licensed Training Center

- Implementing SQF Systems, edition 8

- Edition 8 update training

- Quality Systems for Manufacturing (select training centers)

SQF Online Training

- Implementing SQF Systems, edition 8

- New Quality Systems for Manufacturing

Resources

- Relevant topics:

  – Sessions on edition 8 Code requirements

  – Change management

  – Equipment specifications

  – Food fraud

  – Allergens

  – Environmental monitoring plans

  – And more!

- Pre-conference training courses

- Networking with peers and food safety experts

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November 7-9, 2017 | Hyatt Regency Dallas | Dallas, TX
SQF INSTITUTE is a division of FMI THE VOICE OF FOOD RETAIL

Resource: SQF's Online Quality Course – Coming Soon

- Fully aligned with the SQF Quality Code

- Represents the quickest and most convenient route to SQF Quality Practitioner

- Learn more about the SQF Quality Code, Building The Food Quality Plan and Corrective Actions

- Learn more at: **https://academy.alchemysystems.com/sqf-quality-course/**
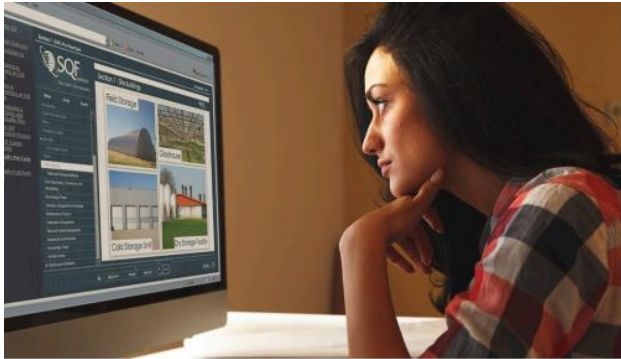
- **Course:**
  - SQF Quality Course
  - Implementing SQF Systems course and exam
- **Exams:**
  - Implementing SQF Systems (Post-Farm Gate)
  - Implementing SQF Systems (Pre-Farm Gate)
  - Advanced SQF Practitioner
  - Auditor
  - Professional Update

Resource: SQF Compliance Training

- **Access hundreds of multi-lingual courses** on critical food and workplace safety topics

- **Reinforce your message** with coordinated huddle guides, digital signage, and posters

- **Promote employee-supervisor** communication with our on-the-job coaching app

- **Stay prepared for unannounced audits** with automatic documentation and reporting

Resource: Alchemy SQF Consulting Support

Training

SQF Edition 8 Conversion Course Overview
- New Program Best Practices
- Facility Compliance Review

Gap Analysis

- Compare existing programs and operations to the new code requirements
- Use corrective action register and road map for compliance

Development

- Creation of new programs required for compliance
- Food Fraud Risk Assessment and Mitigation

Internal Audits

- Completion of Internal Audits to facilitate compliance
- Facilitation of Management Reviews and Crisis Management Plan Tests
- SQF Audit Preparation and Support

Q & A

THANK YOU

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