



# Safety of imported foods A commercial perspective

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- The unique UK chilled prepared food sector, CFA
- Standards and certification
- Best practice
- Key principles
- What's critical in assuring safety
- Standards required of suppliers
- Traceability
- Guidance





# **UK Retail Chilled Prepared Food Industry**

Year	Market (£m)
1989	550
1999	4550
2005	7357
2010	9163

### Chilled foods' unique position

- Predominantly UK-made Very few finished product imports
- Unpreserved
- Just in time
- HACCP from the outset
- Exacting microbiological standards
- Significant annual new product development
- · Retail brand dominance, although brands now emerging



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# **UK Chilled Prepared Food Characteristics**

- Mainly multicomponent
  - Complex ingredient streams
  - Animal derivatives content 0-100%, large proportion of foods 5%-25%
  - Remainder: carbohydrate, e.g. bread, pasta, produce
  - Potential for re-working generally low
  - Much is handmade
- Short shelf life ingredients and final products
  - Ingredient replenishment in line with projected orders
  - Rapid distribution for sale
- Specified suppliers, own/contract growers
  - Integrated control high risk ingredients not bought on open market
- Largely ready to eat
  - Hygiene is critical





















# **UK Chilled Prepared Food**

- Dressed salads
- \*Leafy salads
- Prepared Vegetables
- Prepared fruit
- Stir fry kits
- Sandwiches
- Sandwich fillings
- Quiche/flans
- Dressings

- Pizza
- Recipe dishes/kits
- Meal Accompaniments
- Sushi
- Filled fresh Pasta
- Soups (some RTE)
- Sauces (some RTE)
- Dips
- Desserts

Items in green include ready to eat variants

\*Leafy salads (1990+): UK: 2.7 x109 packs, Worldwide: 2x1010 packs

# **Chilled Food Association**

- Who are we?
  - Represent professional manufacturers supplying UK market
- What is our Mission?
  - To promote and defend the reputation and value of the professional chilled food industry through the development and communication of standards of excellence in the production and distribution of chilled food





# **CFA's Overall Strategy**

- Promote CFA standards and the sector to regulatory bodies, policymakers and other stakeholders
- CFA Members promote CFA standards throughout their supply bases
- CFA catalyses action on issues broader than the chilled food sector alone
- Aims to attract members who
  - Are professional chilled food manufacturers and chilled component/raw material suppliers
  - Meet CFA Guidelines standards
  - Are certificated to appropriate technical standards



# **Standards & Certification**

- CFA's foundation
- CFA membership requirements
  - Statement of compliance with CFA's Guidelines
  - Supporting reference from an existing member
  - Corroborative competence information
    - BRC or IFS certificate + non-conformances and close-outs
    - CV of the person responsible for food safety
- 14/12/89 Minister for Food Safety, David Maclean
  - First edition CFA Guidelines + Accreditation Scheme
  - BRC endorsement ⇒ aspired reduction in audits
  - EFSIS launched created at CFA's request



## **Enforcement Layers: Own Label Chilled Food**

- 1. Food safety management system internal audit
  - And day to day management
- 2. Customer (retailer) audit
  - And interim visits
- 3. Third party audit
  - e.g. BRC (corrective action within 28d)
- 4. Environmental Health visit
  - Frequency based on scoring



## **CFA Best Practice Production Guidelines**

• CFA Guidelines = 

| CFA Guidelines |

- hygiene area terminology differs but standards are the same

 CFA Guidelines publicly endorsed by major retailers at senior technical level











# **Key Principles: RTE, RTRH, RTC**

#### • Ready to Eat (RTE)

Intended by the producer or the manufacturer for direct human consumption without the need for cooking or other processing effective to reduce to an acceptable level or eliminate microorganisms of concern

#### Ready to Cook (RTC)

Designed to be given a heat process delivering a 6-log kill with respect to vegetative pathogens (a minimum process equivalent to 70°C/2 mins) throughout all components

#### Ready to Reheat (RTRH)

Manufactured in a High Care or High Risk Area and is designed to be reheated by the final consumer





## What Makes Chilled Food RTE?

## RTE food safety cannot be retrofitted

It must be built into the system from the beginning

## **Controls at manufacture:**

- Manufacturer's risk assessment and product design, i.e.
   HACCP plan
  - Supply QA and audits raw materials
- Appropriate controls
  - Minimise potential for contamination by zoonotic organisms
    - CFA's Micro Guidance for Growers [produce]
    - CFA Best Practice Guidelines for the Production of Chilled Food





## What Makes Chilled Food RTE?

## **Controls at manufacture:**

- Hygienic preparation and packing
  - —High Care and High Risk Areas
  - Prevent re-/cross-contamination

## **Key Principles: Manufacturing Hygiene Areas**

#### Low Risk Area

- Raw material intake, ready to cook foods, packaged product
- Separate equipment, utensils, staff and changing areas

#### High Care Area (raw HCA)

- RTE and RTRH food production
- Includes RTE/RTRH ingredients <u>not</u> thermally processed (minimum 70°C/2") <u>but</u> having been decontaminated (validated) and grown/produced to RTE standards
- Separate equipment, utensils, staff and changing areas

#### High Risk Area (cooked HCA)

- RTE and RTRH food production
- Only thermally processed foods (minimum 70°C/2")
- Separate equipment, utensils, staff and changing areas





## What Makes Chilled Food RTE?

## **Controls at manufacture:**

- Hygienic preparation and packing
  - —High Care and High Risk Areas
  - Prevent re-/cross-contamination
- Specified thermal processes followed by rapid chilling
  - Equiv. to minimum 70°C/2 mins: ≤10d shelf life
  - Equiv. to minimum 90°C/10 mins: >10d shelf life
- Limited shelf life
  - Ensure peak quality
  - Minimise opportunity for microbial growth



# **Traceability**

The ability to trace and follow a food, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, through all stages of production, processing and distribution

Backwards (to source)
and
Forwards (to customer)



# **Traceability**

Traceability throughout the supply chain is a nonnegotiable, integral part of chilled food management systems

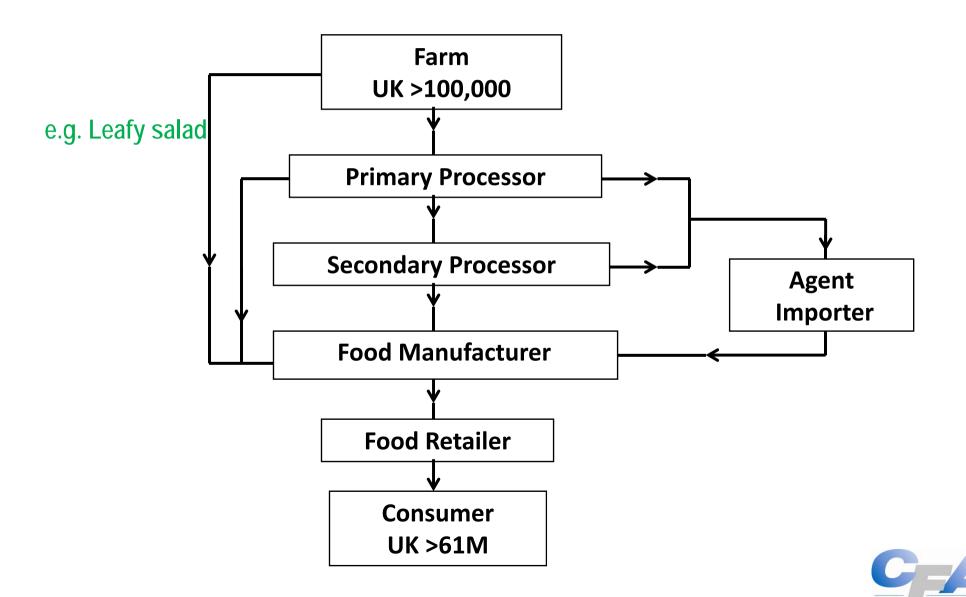
Traceability is a consequence of HACCP

#### CFA members use

- Known Suppliers
- Known Standards
- Known Sources
- Partnership throughout the supply chain



# **Retail Supply Chain Routes**



# **Supplier Approval & Management Process**

Supplier approval inspection *v.* technical standards



Material inspection v. specifications



Supplier management - Repeat inspection *v.* technical standards



Continuous material appraisal *v.* product & process specification

Traceability



## **Technical Standards for Suppliers**

- CFA Guidance incorporates traceability:
  - Manufacturing hygiene ('The CFA Guidelines')
  - Pesticides due diligence guidance
  - Veterinary Residues Management
  - Microbiological Guidance for Growers
- Companies' Codes
- Retailer Codes
- BRC Global Standard



## **Technical Standards for Suppliers**

## **Supplier approval Criteria:**

- Structure & Plant
- Hygiene & Housekeeping
- Process Control Traceability
  - System must enable to trace to source
  - Challenge system on approval visit
  - Poor system no approval
- Finished Product Control
- Foreign Body Control
- Infestation Control
- Management Control
- Product Quality



# **Effective Traceability**

- Must link a lot or batch with its source and any treatment it has received
- Will allow rapid access to product information
- Can limit the potential scope of a problem associated with a raw material
- Can help identify where the source of a problem may be





# Example 1 – Leafy Salad

- Crop protocols: GAP/HACCP
  - Assured Produce (UK), EUREP GAP (EU), GlobalGAP, CFA MGG2
  - Retailer codes
    - Assure GAP compliance Third party verification
- Contracts and audits
  - Specified suppliers traceability generally to field level
  - Irrespective of source
    - Regular audits of suppliers
    - Common criteria and standards
    - Risk assessments: grower capabilities, performance
- Raw material batch segregation in processing
  - Traceability



# **Produce Raw Material Traceability**

- Lot number
- Date of harvest
- Identity of the
  - farm (plot or field)
  - producer
  - country of origin
- Chain of ownership of the material
  - from grower to recipient
- Agricultural inputs (e.g. composted manure/fertiliser, irrigation, pesticides)
  - dates of application
  - input lot numbers

# **Example 2 – Thai Chicken**

- Contracts and audits
  - Integrated production chain
    - Known, specified, audited suppliers
    - Raw material not bought on the open market
    - Risk assessments of suppliers capabilities & performance
  - European standard plants
    - Verification and audits
  - HACCP
  - Traceability to source
- Supplied stock quality/safety = raw material issue:
  - Must relate to RAW MATERIAL source codes, NOT simply plant/finished product codes

# What's Critical in Assuring Chill?

## Standards implemented must be appropriate, i.e.

- Management of supply chain inc traceability, e.g.
  - RTE ingredients grown/produced to RTE standards
- Manufacturing hygiene management robust
  - Segregation in place
  - Processing and shelf life appropriate
- CFA members use
  - Known Suppliers
  - Known Standards
  - Known Sources
  - Partnership throughout the supply chain



# **Key CFA Guidelines**

#### Primary production

- Microbiological Guidance for Growers
- Pesticides Due Diligence
- Veterinary Residues Management Guidance

#### Factory

- Best Practice Guidelines for the Production of Chilled Food
  - Covers <u>all</u> chilled prepared foods: <u>www.tsoshop.co.uk/chilledfoods</u>
- Hygienic Design Guidelines
- Multicultural Hygiene Training
- Produce washing & washing assessment protocols

#### General

- Water Quality Management Guidance
- Guidance on the use & interpretation of micro testing
- Guidance on the Practical Implementation of the EU Micro Criteria Regulations (FSA-endorsed CFA/BRC)
- Lm and shelf life guidance (CFA/BRC/FSA)









The centre of excellence for the chilled food industry

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