

# Horizon Scanning in the Hospitality Sector

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***The purpose of the exercise is to consider any new and arising microbiological food safety risks for caterers.***

***David Nuttall***  
***Vivianne Buller***



# Background and Aims

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- ▶ Outline – Horizon scan the catering industry to gauge opinions of new & emerging food preparation/cooking techniques.
- ▶ Aims – to identify any emerging microbiological issue in the catering/hospitality sector that may require ACMSF consideration



# Background and Aims

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- ▶ Background to the size of the Hospitality Sector
- ▶ Recent research indicated size of market in 2011 was £65.4bn



# Gathering the views of the catering sector

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- ▶ Large industry to horizon scan, therefore key individuals to target needed careful consideration
- ▶ The first task was to identify the various food service sectors (listed below) and then consider the best way of reaching as wide a range of caterers to take part in the consultation exercise.



# Gathering the views of the catering sector

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- ▶ **Business & Industry** hotels, restaurants and workplace
- ▶ **Education and Public Services schools**, college, universities, police, fire, prison and young offenders
- ▶ **Healthcare & Welfare** hospitals, residential homes, meals on wheels, homeless and family shelters
- ▶ **Leisure** theatres, golf and sporting , shopping centres and event catering
- ▶ **Ministry of Defence** army navy and air force
- ▶ **Travel** trains, stations, planes, airports. motorway services



# Gathering the views of the catering sector

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- ▶ Given the limited time period and the size of the foodservice/catering/hospitality industry we decided that the best way forward would be to contact all the professional bodies and associations.
- ▶ We identified 20 leading organisations to involve in this exercise. We appreciated that this exercise would just be a snapshot of a few caterers and not representative of the whole catering industry.



# Gathering the views of the catering sector

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- ▶ **Question 1:**-In the first question we invited caterers to comment on any arising food safety risks or issues they wanted to bring to our immediate attention
- ▶ **Question 2:**- Changing food preparation techniques
- ▶ **Question 3:** - Agricultural changes in farming
- ▶ **Question 4:** - Global food sourcing and production
- ▶ **Question 5:** - Food processing and production changes



# Results

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- ▶ 21 respondents from all food service areas= international food service/contract caterers/fast food organisations/craft guild of chefs/public sector caterers/institute of hospitality
- ▶ The timing of the exercise was unfortunate & number of respondents disappointing yet a good range was obtained. More information from the high end restaurant sector would have been useful.





## Emerging themes from the consultation exercise

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- ▶ Sous-vide /water bath cooking – more guidance required (16)
- ▶ Use of Vac pac /gas flushing to extend shelf life (5)
- ▶ Salt reduction and effect on micro safety/shelf life (3)
- ▶ Norovirus in shellfish (5)
- ▶ Trend to rare pork & using raw eggs in mousses & mayonnaise (11)
- ▶ Cross contamination in catering businesses linked to E.coli (3)
- ▶ Undercooking chicken livers for pate (3)



Q1 are there any arising food safety risks or issues you want to bring to our immediate attention?

- ▶ “Lack of information around Norovirus”
- ▶ “A trend by some chefs to serve Pork pink”
- ▶ “Impact of salt reduction on food safety margins, product shelf life”
- ▶ “The fashion for low temperature/water bath food preparation techniques is probably far more prevalent in the hotel and restaurant sector “
- ▶ “Low temperature cooking needs very precise guide lines regarding food safety and some “Body” responsible for ensuring that the guide lines are adhered to”

## Q2. Food preparation techniques, cross contamination, infected food handlers, new catering businesses, training and food safety regulations

- ▶ “**HACCP** for Sous-vide is subject area - very little guidance or practical advice”
- ▶ “an area of concern and the dangers of the water bath”
- ▶ “Training should be mandatory/statutory”
- ▶ “TV chef’s use raw eggs in mayonnaises, chocolate mousses etc without giving due warnings”
- ▶ “Celebrity chefs should be aware of the trends and practices that they are setting not only from the creative part of the showcasing, but the hygienic practices such as no protective head covering as an example, the food safety part of the presentations should be given more thought”

Q2. Food preparation techniques, cross contamination, infected food handlers, new catering businesses, training and food safety regulations

- ▶ **“Understanding the cooking process-** decreasing temps increasing times of cook can give similar micro effects to higher temps/shorter times—but only to a point. If you drop temp too far, death will not occur”
- ▶ **“Clarity and understanding** of information- FSA recommends 70/2 at coolest point for everything. Most kitchens will cook whole muscle beef medium or rare (and this may not be seen to be a large risk), but this cannot be done for poultry/pork etc. How can clear un-confusing information be given that clarifies why the risk varies”

## Q2. Food preparation techniques, cross contamination, infected food handlers, new catering businesses, training and food safety regulations

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- ▶ **“Cross contamination** – huge issue- catering kitchens may not have the separation of food factories, advice on where & how to store raw & ready to eat (RTE) in same area whilst minimising cross contamination risks. How to handle raw & RTE in the same work area. Decontamination of work area, utensils, equipment, hands, clothes”



## Q3 Agricultural changes

- ▶ “The recent Norovirus in shellfish sampling exercise is concerning and worthy of further research”
- ▶ “Reduced use of pesticides appears to be leading to an increase in the number living creatures going through the food chain to customers”
- ▶ “Climate change is something to be aware of, and monitor as it could change sourcing of ingredients & thus microbiology”

## Q4 Global food sourcing and production risks. Food sourcing and procurement from SME`s

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- ▶ “It should not increase the risk to food safety if local SME Food suppliers are audited in the same way as any supplier”
- ▶ “Complexity of global supply chain and traceability challenges”



## Q5 Food processes and production changes

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- ▶ Salt reduction affecting food safety
- ▶ “Control over use of novel technologies outside EU (especially for products imported into EU)
- ▶ “**Shelf life-** how long is the life of a product produced by caterer- clear information. For different product types how long could I keep them & how do I store them”





## Description of processes

- ▶ **Vacuum packaging-** The removal of all or most of the air within a package without deliberate replacement with another gas mixture. In most systems, heat-shrinkable films are used. After clipping or heat-sealing, the pack is either dipped briefly in hot water or exposed to hot air or steam in a shrink tunnel, which shrinks the bag over the meat, leaving minimal free space. Any residual oxygen is rapidly absorbed by the meat, and carbon dioxide is produced within the pack, inhibiting bacterial growth, and extending storage life at low temperatures.

## Description of processes

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- ▶ **Sous vide** - A system of cooking raw or par-cooked food in a sealed pouch under vacuum. The pouches receive a pasteurisation heat treatment, are cooled and stored under refrigeration at less than 3°C. Products are regenerated using heat, usually by *bain marie* or microwave, before consumption.



## Description of processes

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- ▶ **Water bath cooking** -Food is vac-packed, then placed in a water bath for prolonged, low-heat cooking (between six and 46 hours at temperatures of 55-68°C).
- ▶ **Modified Atmosphere Packaging (also known as gas flushing)**-The modification of the atmosphere surrounding the food by adding gases such as carbon dioxide or nitrogen. The technique is used to extend the shelf life of fresh or minimally processed foods.



# Risk management issues raised

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- ▶ Risks from raw eggs in mayonnaise & mousses-warnings offered (5)
- ▶ FSA guidance on cooking meats (2)
- ▶ Under resourced environmental health & inconsistent assessment between authorities (reference to stars and concerns around timescales to get reassessed) (7)
- ▶ Training inconsistencies / mixed messages /funding (21)
- ▶ Celebrity chefs image portrayal (3)
- ▶ Changes to labelling & best before dates/shelf life for caterers (10)
- ▶ Procurement/global foods/  
food waste/food sourcing (28)



# Conclusions and recommendations

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- ▶ Reinforcing food safety messages. (educating the public on risks to eating rare/undercooked foods)
- ▶ Introduction of Sous vide/water bath/slow cooking into the domestic market needs food safety guidance
- ▶ These new techniques raise conflicting opinions amongst caterers & the food safety messages around these practices need reiterating.
- ▶ Comments and issues about food safety risk management which outside the remit of ACMSF be passed onto the FSA.

