RICE BASED DESSERTS PROJECT REPORT

The issue

Rice based desserts or 'rice cakes' are a good medium for microbial growth due to their abundant nutrients, high water activity and almost neutral pH, and therefore meet the criteria to be categorised as a potentially hazardous food (PHF) which are required to be stored under temperature control.

These products are commonly sold at room temperature however, as low temperatures cause hardness due to starch retrogradation which is undesirable to consumers.

The NSW Food Authority regularly receives complaints from consumers and local councils in relation to rice cakes having non-compliant labelling (allergen declaration, incorrect address, legibility and date marking) and inadequate storage conditions in retail facilities.

What we did

The project focused on rice cake manufacturers including home based and seasonal businesses. Nineteen active businesses were inspected over a five-month period.

The inspections involved authorised officers assessing hygiene, processing, product samples, labelling compliance and construction and aimed to increase baseline compliance rates to at least 95%, in line with the Food Safety Strategy 2015-2021.

Compliance objectives:

Determine baseline compliance in relation to the Food Standards Code (phase 1 inspections) to implement remedial action for non-compliance (enforcement action) and to determine the change in compliance rates post intervention (phase 2 inspections).

Food science objectives:

Through samples analysis, gather information on the intrinsic properties (pH and water activity) and the microbiological quality of rice cakes at the end of processing and at the end of shelf life; review the manufacturing processes; develop and implement measures to make sure that rice cakes made in NSW are safe for consumption.

A questionnaire was used to collect information on the type of products, volume of production, and manufacturing process

When possible, three replicates of each product were collected from each manufacturer and tested for a range of microorganisms:

- Standard Plate Count (SPC)
- *Bacillus cereus* enumeration
- Coagulase positive staphylococci enumeration
- *E. coli* enumeration
- *Salmonella* detection
- Yeast and moulds enumeration
- pH
- Water activity

All products were kept at room temperature before they were sent to the laboratory for testing.

What we found

Phase 1 inspections found that: construction of fixtures, fittings and equipment; cleanliness of premises and equipment; use of sanitiser (by way of heat or chemical application) on food contact surfaces; and failure to have a documented food recall system in place were the areas where businesses failed to comply.

An increase in compliance in these areas was observed during the follow up inspections.

Phase 1 inspections found that no business fully complied with all aspects of food product labelling.

Labelling non-compliances ranged from minor low risk issues such as insufficient nutrition information panels to critical high risk issues such as the omission of allergen declarations. The breaches ranged from single to numerous product types within each business.

An increase in compliance rates was observed following re-inspection for the high risk components of food labelling including allergen declarations, directions for storage, date marking and statement of ingredients. Many businesses design and print their labels overseas, therefore shipping time of new labels affected compliance rates during phase 2 inspections.

The catalyst for increased compliance rates between phase 1 and phase 2 inspections was a combination of education and enforcement action.

Product testing at both manufacturer and retail level revealed that there was no major safety issue with the products when displayed for sale at room temperature. This is subject to the implementation of three key food safety control measures:

- use of high quality ingredients,
- effective heat treatment, and
- a strict hygiene and sanitation regime to prevent post-processing contamination.

The outcome

Products manufactured under those conditions should be safe to be stored at room temperature until the end of the next day (day of manufacturing +1). Based on literature and microbiological testing, the products are more likely to spoil before they become unsafe during this time.

During the project, businesses addressed and rectified issues relating to: cleaning and sanitation; construction; and labelling (including allergen declarations, storage conditions and traceability).

Next steps

Following this project, the below actions have been undertaken by The Food Authority:

- Relevant factsheets identified and reviewed for translation into key languages. These include:
  - Food recall and withdrawal requirements and template.
  - General labelling requirements and nutrition information panel (NIP) requirements.
- Factsheet developed on manufacturing procedures, storage directions and shelf life for rice based desserts, based on the key issues and project outcomes.
- Translation of rice based desserts factsheet.
- Project findings and the industry fact sheet have been communicated to councils.
- Businesses informed of the requirements and inspected as part of the MWIP inspection program.

About the NSW Food Authority: The NSW Food Authority is the government organisation that helps ensure NSW food is safe and correctly labelled. It works with consumers, industry and other government organisations to minimise food poisoning by providing information about and regulating the safe production, storage, transport, promotion and preparation of food.

Note: This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code and the *Food Act 2003* (NSW).

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