

# Shelf Life & Stability Testing

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## FOOD SAFETY

### Shelf Life & Stability Testing

Deterioration due to microbial activity can be a major threat to the safety of food and has an impact on the quality, so strict regulations and guidelines need to be adhered to.

It is essential therefore to accurately determine the use by or best before dates for your products in order to keep your brand and consumers safe. Microbial shelf life testing provides the fundamental information to confirm and conclude a microbial risk assessment.

Where deterioration of a food affects consumer acceptance without impacting health and safety a 'best before' date is applicable whereas if a food becomes unsafe after a defined period of time a 'use by date' is required. Foods with a shelf life of at least two years are not required to display a best before date.

Given the complexity of the factors contributing to the shelf life of food from the physical, microbiological and chemical processes, product characteristics such as moisture and acidity levels, external factors like storage, transport and packaging you need to be confident that your consumer has the best experience possible from your products by providing them with accurate shelf life information.

Microbiological analysis should form part of validating and verifying an implemented HACCP system.

#### Our Services

The length of the use by date\* for foods can be determined by using storage trials to estimate the physical, chemical and microbiological stability of the food. Our experts can develop and carry out a standard microbiological testing method to assess the bacterial content of food and beverage products as well as feed products to determine their use by date as well as associated hygiene or product practices. Our methods are based on standard ISO method and consist of testing on growth plates and results are recorded and interpreted by a qualified microbiologist within an accredited laboratory setting.

- This method includes a pre-agreed screen of the product for the presence or absence of microorganisms as well as the amounts present over a pre-agreed time period. This time period could either be used to determine the shelf life of a new product or to confirm the shelf life in case of product re-formulation.
- Results are interpreted by a qualified microbiologist and are reported through in a PDF format which includes an interpretation of the results with regards to the product food safety.
- We offer a follow up service in which you can discuss your results and possibilities for further testing or services with a qualified microbiologist.

Fera is a national and international centre of science excellence for interdisciplinary investigation and problem solving, translating research into real-world solutions across the agri-food supply chain. Fera acts as the National Reference Laboratory under Regulation (EC) No. 882/2004 for 7 areas. With a large range of testing abilities, our multi-disciplinary approach gives an overall view of any food issue you may be facing, providing you with the complete information you need to make the strong decisions needed to address these issues.