

Food Technology Program

Food Safety and Innovation

SOUTH
AUSTRALIAN
RESEARCH &
DEVELOPMENT
INSTITUTE
PIRSA

Overview

The Food Technology Program consists of a team of scientific and technical experts in food innovation and product development. The primary objective of the program is to provide technical support and assistance to food businesses to improve product quality, increasing the competitive advantage of existing industries.

Food Technologists

Nathan Freeman and Andrew Maronich are Senior Food Technologists in the Food Technology Program within the Food Safety and Innovation research program. Nathan has a background as a chef and also runs the sensory service at SARDI. Andrew has over 20 years' experience in product development, quality control and process development of food products, having held various NPD/R&D positions with prominent SA food companies such as Berrivale Orchards, Bickfords and Tastemaster.

Food Technology Service

Under a state Government funding arrangement, South Australian food businesses have access to a food technology service to facilitate innovation, overcome minor issues and receive advice on further improvements. Initial consultations are free for South Australian companies.

The SARDI Food Technology team also provides research and development assistance on a fee-for-service basis and can offer advice on funding opportunities to support innovation in business. Fee-for-service work in the form of larger projects and for non-South Australian food businesses is also available.

Facilities

The Food Technology team is located at the Waite Institute, the state's premier precinct for food research and the site of the SA Food Innovation Centre. The facilities include analytical and sensory laboratories, a new product development kitchen along with small-scale packaging and processing equipment.

Capabilities

New Product Development

Develop or redevelop food products, advise on ingredient selection, problem solve formulation and processing issues.

Sensory and Consumer Acceptability

Independent and unbiased evaluation of products to support new product development, changes in product composition and shelf-life assessment. Focus groups, consumer/market surveys, sensory evaluation and consumer acceptance testing are used.

Packaging

Determination of appropriate packaging solutions to maintain product quality and extend shelf-life. Application of novel technologies such as smart and active packaging.

Shelf-life assessment

Microbiological and biochemical shelf-life assessments to underpin date marking of packaged products.

Functional Foods

Modification of processes and formulations to preserve biological activity of functional ingredients and enhance nutritional function of foods.

Value-adding / Market Access

Addition or substitution of ingredients to optimise cost and/or functionality. Evaluation of the food safety impact of production systems in relation to existing standards and levels of competitors.

Waste Utilisation and Transformation

Evaluation of novel processes and technologies to reduce food waste and assist in waste transformation from concept to test marketing.

Food Processing and Quality Control

Optimisation of processes for increased productivity and cost reduction. Evaluation of food businesses and provision of alternate processing solutions. Validation of quality-based indicators to support premium products.

Previous Projects

- Development of sauces for seafood products
- Shelf-life of a vacuum packaged ready-to-eat vegetable product
- Utilisation of finfish processing wastes
- Sensory assessment of potato varieties using different cooking techniques



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