SARDI Food Sciences
Food Technology

Introduction

The Food Technology Program (FTP) is located at the Waite Institute, which is the state’s main precinct for food research.

The facilities include:
- Analytical and sensory laboratories
- Product development kitchen
- Small-scale packaging and processing equipment

The primary objectives are to provide technical support and assistance to food businesses and to improve product quality, increasing the competitive advantage of existing food industries.

Main activities:

**Research and Development** – new product development, shelf life, and sensory evaluation.

**Processing** – process improvement, advice on equipment and packaging suitable for developed prototypes.

**Product Quality** – ingredients, product composition, shelf-life testing, product analysis, food safety, allergens and nutrition information panels.

Under a state Government funding arrangement, food technology service is provided to South Australian food businesses in close collaboration with Food South Australia to facilitate innovation and solve minor technical issues.

The program also provides fee-for-service work in each of the above areas for larger projects and for non-South Australian food businesses.

**New product development**

Complete NPD service available starting with ideation through to prototype product development. Advice on ingredient selection, processing, packaging options, product shelf life, chemical and microbiological testing requirements and evaluation of the final product.

**Sensory and consumer testing**

Consumer research including designing and administering questionnaires, focus groups and consumer acceptance testing are used.

Sensory evaluation methods providing a range of tests from simple triangle testing to more complex sensory profiling of products using trained panels.

**Food processing**

Optimized for increased productivity and cost reduction. Working with food businesses to evaluate existing processes and provide alternate processing solutions.

**Market access / value-adding**

Evaluation of the food safety impact of new production systems in relation to existing standards and levels of competitors.
Packaging
Assessment of existing technologies and advice on novel technologies to improve product safety and shelf life.

Shelf-life assessment
Shelf-life studies to determine approximate date marking of packaged products.

Functional foods
Modification of processes and formulations to preserve biological activity of functional ingredients supported by sensory and analytical testing. Applications in minimally processed foods.

Lean manufacturing
Evaluation of existing and novel processes and technologies to reduce food waste, increase productivity and assist in waste transformation from concept to test marketing.

Food safety and quality control
Assistance with food safety plans (HACCP), analytical techniques and quality control procedures to ensure product quality.