

Client overview

A global dry food manufacturer was seeking novel and innovative techniques for producing shelf-stable (>12 months) dry food products. Their current dry food products require extensive processing steps (including milling, blending and extrusion equipment) and a range of ingredient types (including particles, powders, liquids, emulsions) to provide the required shape, colour, texture, taste and nutritional profile.



The client wished to explore new or different manufacturing processes that could be applied to the production of shelf-stable dry food products to create future products and enhance its product portfolio.



The search

For Phase 1, Strategic Allies (SAL) initiated a technology landscape to capture novel / innovative approaches that have been adopted for producing dry food products. Dry foods of interest included cereal, pasta, snack foods, pet food, animal feed, etc. and can come in a variety of size, shape and function, but are generally small enough to be picked up in a consumer's fingers.

Looking across the dry food manufacturing process flow, SAL identified:

- Novel raw ingredients (e.g. alternative protein) that have been added into dry food products
- Gentle cooking approaches that enable cooking at lower temperatures or shorter time
- Innovative cutting / portioning technologies
- Gentle drying techniques that enable better preservation of vitamins/minerals
- Non-thermal sterilisation approaches
- Novel coating methods for pathogen control and/or palatability improvement

Outcome

More than 40 ingredients and/or technologies were presented to the client - SAL identified and provided an overview of the innovative approaches that have been adopted for producing shelf-stable dry foods.

The client is currently conducting several internal review sessions to shortlist the best ingredients and/or technologies to move forward into a detailed Phase 2 study with SAL.

"...we were blown away by the deliverables"

"...the output has been very informative"

"SAL have identified really interesting technologies"