

TECH OFFER

Ready-to-Eat Wholemeal Purees for Special Care Groups



KEY INFORMATION

TECHNOLOGY CATEGORY:
Sustainability - Sustainable Living
Foods - Ingredients

TECHNOLOGY READINESS LEVEL (TRL): **TRL4**
COUNTRY: **THAILAND**
ID NUMBER: **TO175028**

OVERVIEW

To address the challenges in chewing and swallowing faced by the elderly and other special care groups such as stroke patients, researchers from a Thai university have developed ready-to-eat wholemeal purees that serve as an all-in-one meal support.

Suitable for those on an IDDSI Level 4 diet, it is designed as a healthy, special care food to provide high nutritional values and energy and to aid health rehabilitation and recovery. In addition to patients with dysphagia, this puree is also suitable for health-conscious consumers.

The team is seeking partners to bring the product to commercialisation and obtain certification according to global standards. They are also open to further develop and customise new products.

TECHNOLOGY FEATURES & SPECIFICATIONS

Texture modification, flavour and process technologies were utilised in designing this special care food that features:

- Enhancement of patients' appetite through a savoury menu with sweet flavour that also stimulates saliva to aid swallowing
- Safe-to-swallow, soft texture, classified as Level 4 pureed food according to International Dysphagia Diet Standardisation Initiative (IDDSI), that continues to provide patients with the feel of eating and swallowing
- 100% plant-based ingredients that provide high energy and nutrition
- High plant protein-prebiotic
- Cost-effective thermal process with shelf-life of 1-year at ambient temperature storage

POTENTIAL APPLICATIONS

- Hospital and nursing care: Suitable for swallowing practice together with nutrient and meal intake support during rehabilitation at hospital and subsequent recovery at home. Also suitable for special care groups who need softened foods with high and easily digestible calories such as the elderly, patients after surgery, cancer patients, etc.
- Health and wellness: Providing holistic, nutritious meals for health support to health-conscious people who prefer plant-based and wholemeal proteins and prebiotics.
- Health and vegan restaurants: Incorporating this puree as a part of the menu e.g. ice-cream, breakfast bowl, etc.
- Baby food: Giving basic nutrients and safe-to-swallow texture for baby during the mastication practice period

MARKET TRENDS & OPPORTUNITIES

In 2023, the global dysphagia management market is estimated to be US\$4.4 billion. It is expected to grow at a CAGR of 6.2% during the forecast period of 2023-2030. (Coherent Market Insights, 2023)

UNIQUE VALUE PROPOSITION

- Smaller serving size but higher in energy and nutrients (1 g food: 1.3-1.5 kcal)
- High plant protein (equivalent to 3.5-4 egg whites)
- No whey protein or any milk
- Promotes better appetite, higher food intake, faster recovery
- Ready-to-eat and matches with a variety of menus