FFOODS Spectrum
perspectives on food technologies & business
ASIA

Chulalongkorn University students reimagine Thai classic with health-conscious Pork Knuckle Trio

15 October 2025 | News

The innovation earned the team the Second Runner-up Award at the FoSTAT Food Innovation Contest 2025



The innovation earned the team the Second Runner-up Award at the FoSTAT Food Innovation Contest 2025

A student team from Nutrinex, the Department of Food Technology at the Faculty of Science, Chulalongkorn University, has developed an innovative twist on one of Thailandâ??s most beloved comfort dishes: braised pork leg. Their creation, â??Pork Knuckle Trio,â?• is a nutritious alternative designed especially for the elderly, offering high protein with reduced sodium, fat, and sugar content.

The innovation earned the team the Second Runner-up Award at the FoSTAT Food Innovation Contest 2025, a prestigious national-level competition held under the theme â??Food Innovation for the Silver Generation.â?•

Braised pork leg, with its tender meat and rich, flavorful sauce, is a favourite across Thailand. However, its high levels of fat, cholesterol, and sodium often make it unsuitable for seniors and those managing conditions such as hypertension and heart disease. The Nutrinex team set out to change that.

â??How can food be delicious without harming our health?â?• asked the Nutrinex team, a question that led to the creation of â??Pork Knuckle Trio,â?• a version that maintains the aroma, tenderness, and satisfying flavour of the traditional dish, but with a health-conscious approach.

â??At home, we have elderly family members who love braised pork leg. But itâ??s not suitable for them because of its high fat content,â?• explained Chettidaporn Mahaboonpachai, a Nutrinex team member. â??When the contest theme focused on food for the Silver Generation, I immediately thought of creating a healthier version.â?•

The result is a product that contains 53 per cent less sodium, over 40 per cent less fat and saturated fat, and 65 per cent less sugar than traditional braised pork leg, making it suitable not only for seniors but for health-conscious consumers of all ages.

Assistant Professor Dr Varapha, the teamâ??s academic advisor, highlighted the broader importance of the innovation:

â??Thailand has fully entered an ageing society, and older adults have unique nutritional needs. They require high-protein foods to prevent muscle loss, but often struggle with fibrous foods due to dental issues. Products like this pork leg are tailored

to support healthy ageing, an increasingly vital focus for the food industry.â❧

With their â??Pork Knuckle Trio,â❧ the Nutrinex team has shown how traditional Thai comfort food can evolve to meet modern health needs, blending flavour, nutrition, and innovation to serve the countryâ??s growing elderly population.