



Food and Nutrition Laboratory

Under the direction of

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Research Programs

Research programs are in the area of food product development for nutrition from Thai rice. The research activity has also focused on novel snacks development that meet the changing needs and demands of consumers. In addition, effect of extrusion and drying process on the physicochemical properties, nutritional value and sensory quality of the healthy snacks are in the field of study.

Publications

- Hirunyophat, P., **P. Chalermchaiwat** and N. On-nom. 2020. Optimization of silkworm pupae powder content and barrel temperature to produce high protein breakfast cereal by twin screw extrusion, pp. 16. *In Proceedings of the 5th International Conference on Food and Applied Bioscience: Insight for Research and Industry 4.0*. 6-7 February 2020, Chiang Mai University. Chiang Mai, Thailand.
- Teravecharoenchai, J., **P. Chalermchaiwat** and R. Thuwapanichayanan. 2020. Principal component analysis application on nutritional, bioactive compound and antioxidant activities of pigmented dough grain, pp. 66. *In Proceedings of the 5th International Conference on Food and Applied Bioscience: Insight for Research and Industry 4.0*. 6-7 February 2020, Chiang Mai University. Chiang Mai, Thailand.
- Srisungwan, S., **P. Chalermchaiwat**, U. Suttisunsanee., S. Jittinandana., R. Chamchan., C. Chemthong and N. On-nom. 2019. Development of Reduced-Sodium Seasoning Powder using Yeast Extract, pp. IC4IR.66. *In International Conference on 4th Industrial Revolution and Its Impacts*. 27-30 March 2019, Walailak University, Nakhon Si Thammarat, Thailand.
- Udomsinka, A., **P. Chalermchaiwat**, U. Suttisunsanee., R. Chamchan., S. Sitima., C. Jittinandana., C. Chemthong and N. On-nom. 2019. Development of Reduced Fat Purple Sweet Potato Ice Cream Mix Powder, pp. IC4IR.92. *In International Conference on 4th Industrial Revolution and Its Impacts*. 27-30 March 2019, Walailak University, Nakhon Si Thammarat, Thailand.
- Sriwilai S., **P. Chalermchaiwat** and S. Raungrusmee. 2017. Effect of Extrusion Conditions on Quality of the Extrudates made from Sungyod Phatthalung Rice, pp. 142-147. *In The International Conference on Science and Technology*. 7-8 December 2017, Thailand.
- Chantaro, P., S. Sribuathong., R. Chareon and **P. Chalermchaiwat**. 2016. Pre-Treatment Conditions Affect Quality and Sensory Acceptability of Dried Osmotic Dehydrated Coconut. *International Food Research Journal* 23(4): 1453-1458.
- On-nom, N., S. Nualkaekul., **P. Chalermchaiwat**, A. Nitithamyong and M.A. Murtaza. 2016. Development of Calorie Reduced Cheese Shake Biscuit from Germinated Homnin Brown Rice Flour. *International Food Research Journal* 23(2): 475-481.
- Chalermchaiwat, P.**, N. On-nom and P. Chantaro. 2015. Preference Mapping of Commercial Khao -Tan Rice Cracker. *International Food Research Journal* 22(6): 2091-2097.
- Chalermchaiwat, P.**, K. Jangchud., A. Jangchud., C. Charunuch and W. Prinyawiwatkul. 2015. Antioxidant activity, Free Gamma-Aminobutyric Acid Content, Selected Physical Properties and Consumer Acceptance of Germinated Brown Rice Extrudates as Affected by Extrusion Process. *LWT-Food Science and Technology* 64(1): 490-496.

Research Team



Research Network

- Department of Agriculture
- Institute of Nutrition, Mahidol University



บทกรรมงานวิจัยแห่งชาติ 2562
 Thailand Research Expo 2019



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โครงการวิจัยที่ดำเนินงาน

ขอบเขตงานวิจัยเกี่ยวกับการพัฒนาผลิตภัณฑ์อาหารเพื่อโภชนาการจากข้าวไทย โดยเฉพาะการพัฒนาผลิตภัณฑ์ขนมขบเคี้ยวรูปแบบใหม่เพื่อตอบสนองกับความต้องการของผู้บริโภคที่เปลี่ยนแปลงไปอยู่เสมอ นอกจากนี้ยังคงศึกษาผลของกระบวนการเอ็กซ์ทรูชั่น และการทำแห้งต่อสมบัติทางเคมีกายภาพ คุณค่าทางโภชนาการ และคุณภาพทางประสาทสัมผัส ของผลิตภัณฑ์ขนมขบเคี้ยวเพื่อสุขภาพด้วย

ผลงานตีพิมพ์

- Hirunyophat, P., **P. Chalermchaiwat** and N. On-nom. 2020. Optimization of silkworm pupae powder content and barrel temperature to produce high protein breakfast cereal by twin screw extrusion, pp. 16. *In Proceedings of the 5th International Conference on Food and Applied Bioscience: Insight for Research and Industry 4.0.* 6-7 February 2020, Chiang Mai University. Chiang Mai, Thailand.
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ทีมนักวิจัย



เครือข่ายงานวิจัย

- กรมวิชาการเกษตร
- สถาบันโภชนาการ มหาวิทยาลัยมหิดล

