



Curriculum Vitae

Institute of Nutrition, Mahidol University (INMU)
999 Phutthamonthon 4 Rd., Salaya, Phutthamonthon
Nakhon Pathom 73170, Thailand

Name: Nattapol Tangsuphoom
นัตถพล ตั้งสุภุมิ

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Current Position: Assistant Professor (2016-Present)

Education:

2008 Ph.D. (Food Science), The Pennsylvania State University, U.S.A.
2002 M.Sc. (Food and Nutrition for Development), Mahidol University, Thailand
1999 B.Sc. with Second Class Honors (Food Technology), Chulalongkorn University, Thailand

Research Interest and Expertise:

1. Proteins and hydrocolloids from food processing waste, and their applications as functional food ingredients
2. Food product development for nutritional and medical purposes
3. Food colloids and emulsions, with specialization on coconut milk and dairy products
4. *In vitro* lipid and protein digestibility
5. Food waste quantification and analysis

Research Experiences:

2018-Present Development of resistant starch-fortified snack and beverage products for overweight and obese adults (funded by National Research Council of Thailand)

2017-Present Development of functional beverages from enzymatic hydrolyzed milk (funded by Agricultural Research Development Agency)
Development of healthy jelly using natural nutrient fortificant from gac fruit (funded by Thailand Research Fund)

2016-2018 Thailand's status and improvement needs to meet the requirement of Codex Alimentarius for establishment of a National Food Control System (funded by Thailand Research Fund)

2016-2017 Thailand: *trans* fat-free country (funded by Agricultural Research Development Agency)
Development of functional beverages from cassava leave extract (funded by National Research Council of Thailand under Research University Network Functional Food Cluster)
Development of nasogastric tube food product from rice (funded by National Research Council of Thailand under Research University Network Functional Food Cluster)
Development of food gel fortified with cassava leave extract for menopause women (funded by National Research Council of Thailand under Research University Network Functional Food Cluster)
Calcium from Pacific white shrimp (*Litopenaeus vannamei*) shell and its application in food (funded by National Research Council of Thailand)

2016 Shelf life study of cold-pressed Sacha Inchi oil (funded by V Miracle Group Co., Ltd.)

2015-2017 Nutritional utilization of Sacha Inchi (*Plukenetia volubilis* L.) oil cake (funded by Thailand Research Fund)
Development of food products fortified with resistant starch for reducing gestational diabetes mellitus risk in pregnant and lactating women in Thailand: dairy beverages (funded by Health Systems Research Institute)

2015-2016 Extraction of protein from Sacha Inchi (*Plukenetia volubilis* L.) oil cake (funded by Thai Rubber Land and Plantation Co., Ltd.)



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- 2014-2017 Nutritional and health benefits of virgin coconut oil (funded by Thailand Research Fund)
- 2014-2016 Food product development for elderly with dysphagia (funded by Mahidol University)
- 2014-2015 Chemical and functional properties of pectin from Nam Wa banana peels and its potential food application (funded by National Research Council of Thailand)
- Study on safety management system for fruits and vegetables in Thailand (funded by Food and Drug Administration of Thailand)
- 2013-2015 Study on food safety scenario in few countries of the Region in relation to strengthening coordination between departments (funded by FAO Regional Office for Asia and the Pacific)
- In vitro* lipid digestibility of coconut milk: effects of processing, ingredients and cooking (funded by Thailand Research Fund)
- Functional and *in vitro* bioactive properties of protein hydrolysate prepared from rice meal wasted from brown rice milk production and its application in cereal beverages (Funded by Thailand Research Fund)
- 2012-2014 Nutritional utilization of shrimp (*Litopenaeus vannamei*) shell (funded by Charoen Pokphand Food Public Co., Ltd.)
- 2011-2015 Development of ready-to-use complementary food supplements and ready-to-use therapeutic foods for malnourished children in Bangladesh (collaborated with International Centre for Diarrhoeal Disease Research, Bangladesh)
- 2011-2013 Development of artificial saliva gel for hyposalivation and xerostomia patients (funded by Dental Innovation Foundation under Royal Patronage)
- 2011-2012 Physical and chemical properties of okra (*Abelmoschus esculentus* (L.) Moench) gum and pectin and their application in food products (funded by National Research Council of Thailand)
- 2011 Preparation and characterization of protein hydrolysate and peptide from rice meal wasted from brown rice milk production (funded by National Science and Technology Development Agency)
- 2010-2012 Development of food gel for oral cancer patients with chewing and swallowing difficulties (funded by Dental Innovation Foundation under Royal Patronage)
- 2010 Development of guidelines for permission of food additives: artificial coloring–erythrosine and carotenoids (funded by Food and Drug Administration of Thailand)
- 2009-2010 Preparation and characterization of rice meal protein concentrate from by-product of enzymatic extraction of brown rice milk (funded by National Science and Technology Development Agency)
- Emulsifying properties of pectin extracted from Khrua-Ma-Noi (*Cyclea barbata* Miers) leaves and its applications in food products (funded by Mahidol University)
- Appropriate technology for the production of food hermitically-sealed in retortable pouch at cottage industry level (funded by Food and Drug Administration of Thailand)
- 2009 Design of a mobile food processing and preservation facility for use during disaster rehabilitation (funded by FAO Regional Office for Asia and the Pacific)
- 2008-2009 Development of low electrolyte beverage for kidney disease patients (funded by Mahidol University)
- 2008 Comparative studies on food safety management system and food and nutrition (funded by FAO Regional Office for Asia and the Pacific)

Training:

- 2018 International Course on Governance and Food Safety in International Food Chain, Centre for Development and Innovation, Wageningen University and Research, The Netherlands
- 2016 Emerging Leaders Network Program 2016, Institute of Food Technologists, U.S.A.



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- 2012 Talent Mobility Preparatory Program, Office of Higher Education Commission and Mahidol University
Regional Training on Food and Micronutrient Intervention, Southeast Asian Ministers of Education Organization Regional Centre for Food and Nutrition, Indonesia
- 2007 ServSafe® Food Safety Training and ServSafe® Food Protection Manager Certificate, The National Restaurant Association Educational Foundation, U.S.A.
- 2006 Teaching with Technology Certificate, Information Technology Services and Graduate School, The Pennsylvania State University, U.S.A.
Graduate School Teaching Certificate, Schreyer Institute for Teaching Excellence and Graduate School, The Pennsylvania State University, U.S.A.

Publications:

International Level

1. Maneerat N, **Tangsuphoom N***, Nitithamyong A. Effect of extraction condition on properties of pectin from banana peels and its function as fat replacer in salad cream. *Journal of Food Science and Technology*. 2017; 54(2):386-397.
2. Ahmed T*, Choudhury N, Hossain MI, **Tangsuphoom N**, Islam MM, de Pee S, Steiger G, Fuli R, Sarkar SA, West KP Jr, Christian P. Development and acceptability testing of ready-to-use supplementary food made from locally available food ingredients in Bangladesh. *BMC Pediatrics*. 2014; 14:164.
3. Mackaman P, **Tangsuphoom N***, Chavasit V. Effect of extraction condition on chemical and emulsifying properties of pectin extracted from *Cyclea barbata* Miers leaves. *International Food Research Journal*. 2014; 21(2):799-806.
4. Karn SK, Chavasit V*, Kongkachuichai R, **Tangsuphoom N**. Shelf stability, sensory qualities and bioavailability of iron-fortified Nepalese curry powder. *Food and Nutrition Bulletin*. 2011; 32(1):13-22.
5. **Tangsuphoom N**, Coupland JN*. Effect of thermal treatments on the properties of coconut milk emulsions prepared with surface-active stabilizers. *Food Hydrocolloids*. 2009; 23(7):1792-1800.
6. **Tangsuphoom N**, Coupland JN*. Effect of surface-active stabilizers on the surface properties of coconut milk emulsions. *Food Hydrocolloids*. 2009; 23(7):1801-1809.
7. **Tangsuphoom N**, Coupland JN*. Effect of pH and ionic strength on the stability of coconut milk emulsions. *Journal of Food Science*. 2008; 73(6):E274-E280.
8. **Tangsuphoom N**, Coupland JN*. Effect of surface-active stabilizers on the microstructure and stability of coconut milk emulsions. *Food Hydrocolloids*. 2008; 22(7):1233-1242.
9. **Tangsuphoom N**, Coupland JN*. Effect of heating and homogenization on the stability of coconut milk emulsions. *Journal of Food Science*. 2005; 70(8):E466-E470.

National Level

1. Dechapinan S, Judprasong K, On-nom N, **Tangsuphoom N***. Calcium from Pacific white shrimp (*Litopenaeus vannamei*) shells: Properties and function as fortificant in soy milk. *Food and Applied Bioscience Journal*. 2017; 5(3):176-195.
2. Zaw HMM, Kriengsinyos W*, Pachotikan C, **Tangsuphoom N**. Enteral tube feeding practices in people with neurological problems in Myanmar: a cross-sectional pilot study. *Journal of Health Research*. 2017; 31(4): 297-305.
1. Phanyotha T, Srichamnong W, Santivarangkna C, **Tangsuphoom N**, Suttisansanee U*. Antiacetylcholinesterase activities from *Gynura procumbens* leaves extracted using response surface methodology. *Agricultural Science Journal*. 2014; 45(2)(Suppl.):17-20.



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2. Phanyotha T, **Tangsuphoom N**, Santivarangkna C and Suttisansanee U. Optimization of extraction conditions for antioxidant activity from *Gynura procumbens* leaf using response surface methodology. *Agricultural Science Journal*. 2013; 44(2)(Suppl):409-412.
3. วิสิฐ จະวะสิต*, รัตนา วัฒนาไพศาลตระกูล, **นัฐพล ตั้งสุภูมิ**. ส่วนประกอบในผลิตภัณฑ์อาหารเพื่อประโยชน์เชิงพันธุภาพ. *วารสารโภชนาการ*. 2552; 44(2):42-55.
4. Chinprahast N*, **Tangsuphoom N**, Prairahong P, Duangrat V. Mixed vegetable and fruit high fiber jelly drink: Effects of carrot, pineapple and pumpkin proportions on physical, chemical and sensory characteristics. *Thai Journal of Agricultural Science*. 2002; 35(2):213-222.

Books:

International Level

1. Chavasit V, Kriengsinyos W, **Tangsuphoom N**, Photi J. Fast foods in transition and nutrition problems in Thailand. In: Sanford MG, editor. *Fast foods: consumption patterns, role of globalization and health effects*. Hauppauge, New York: Nova Science Publishers; 2014. ISBN: 978-1-63321-697-6.
2. Bagchi K, Fardiaz D, **Tangsuphoom N**, Watanapaisantrakul R. *Regional Food Safety Strategy 2013-2017*. New Delhi: WHO Regional Office for South-East Asia; 2014.

National Level

1. ชนิพรณ บุตรยี่, **นัฐพล ตั้งสุภูมิ**. อาหารและโภชนาการสำหรับวัยทำงาน. ใน *สุรเกียรติ์ อาชานานภาพ บรรณาธิการ*. *อยากสุขภาพดี ต้องมี 3 อ.. สำหรับวัยทำงาน*. กรุงเทพฯ: มูลนิธิหมอชาวบ้าน; 2559. หน้า 2-24. ISBN: 978-616-92571-0-3.
2. ชนิพรณ บุตรยี่, **นัฐพล ตั้งสุภูมิ**. อาหารและโภชนาการสำหรับผู้บริโภควัยทำงานและหญิงวัยเจริญพันธุ์. ใน: คณะอนุกรรมการสังเคราะห์องค์ความรู้ด้านอาหารและโภชนาการสำหรับผู้บริโภค ภายใต้การดำเนินงานของคณะกรรมการขับเคลื่อนยุทธศาสตร์เพื่อสร้างความเชื่อมโยงด้านอาหาร และโภชนาการสู่คุณภาพชีวิตที่ดี (ชุดที่ ๓) คณะกรรมการอาหารแห่งชาติ, บรรณาธิการ. *องค์ความรู้ด้านอาหารและโภชนาการสำหรับทุกช่วงวัย*. นนทบุรี: สำนักงานคณะกรรมการอาหารและยา; 2559. หน้า 67-82. ISBN: 978-974-244-374-0.
3. วิสิฐ จະวะสิต, **นัฐพล ตั้งสุภูมิ**, จันทิมา โพธิ์. คู่มือการควบคุมการผลิตน้ำบริโภคในภาชนะบรรจุที่ปิดสนิท น้ำแข็งและน้ำบริโภคที่ผลิตจากตู้น้ำดื่มอัตโนมัติ. นนทบุรี: สำนักงานคณะกรรมการอาหารและยา กระทรวงสาธารณสุข; 2558.
4. วิสิฐ จະวะสิต, **นัฐพล ตั้งสุภูมิ**. หน่วยที่ 10 การวิจัยที่นำไปสู่การพัฒนางานด้านอาหารและโภชนาการ. เอกสารการสอนชุดวิชาประสบการณ์วิชาชีพอาหาร โภชนาการ และการประยุกต์ หน่วยที่ 9-15, สาขาวิชา มนุษยนิเวศศาสตร์ มหาวิทยาลัยสุโขทัยธรรมาธิราช. นนทบุรี: สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช; 2558. 29 หน้า. ISBN: 978-616-16-0759-3.
5. วิสิฐ จະวะสิต, **นัฐพล ตั้งสุภูมิ**. หน่วยที่ 8 วิทยาศาสตร์และเทคโนโลยีของนม. เอกสารการสอนชุดวิชา วิทยาศาสตร์และเทคโนโลยีการอาหารเบื้องต้น หน่วยที่ 8-15, สาขาวิชา มนุษยนิเวศศาสตร์ มหาวิทยาลัยสุโขทัยธรรมาธิราช. นนทบุรี: สำนักพิมพ์มหาวิทยาลัยสุโขทัยธรรมาธิราช; 2554. 53 หน้า. ISBN: 978-616-505-629-8.

Professional Experiences

Oct 2015	Food Safety Consultant, World Health Organization Country Office for Maldives, Malé, Maldives
May-Sep 2011	International Food Technologist, Nutrition Unit, Programme Department, World Food Programme Bangladesh Country Office, Dhaka, Bangladesh
Oct-Dec 2009	Temporary International Professional – Food Safety, Nutrition and Food Safety Unit, Department of Family and Health Research, World Health Organization Regional Office for South-East Asia, New Delhi, India
Sep 2008-Oct 2016	Lecturer, Food Science Unit, Institute of Nutrition, Mahidol University
Jan 2005-Jul 2008	Research and Teaching Assistant, Food Colloids Research Laboratory, Department of Food Science, The Pennsylvania State University, U.S.A.