

Name: Asst. Prof. Mutita Meenune

Education

Degree: Ph.D. (Food Science), Nottingham University, UK

M.SC. (Food Science), Kasetsart University, Thailand

B.Sc. (Chemistry-Biology), Prince of Songkla University, Thailand

Present employment:

Department of Food Technology

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Field of interest: Starch Chemistry, Postharvest of Fruit & Vegetable, Flavour Chemistry

Current researches:

- Minimal process and modified atmosphere packaging of fresh-cut fruits
- Effect of processing methods on quality fruit juice and its stability during storage
- Starch-flavour interactions during heat processing and extrusion process
- Flavour changes/flavour formation in food products
- Rice grain during storage/Extrusion of rice starch-based products

Awards:

Scholarship award for participating as a speaker in the 8th ASEAN Food Conference. 8-11 October 2003 on the topic of effect of heat treatment and high pressure treatment on changes in quality of palm sap. State Ministry for Research and Technology, Hanoi, Vietnam

Publication:

- Naknean, P. and Meenune, M. 2016. Characterization of pasteurized palm sap (*Borassus flabellifer* Linn.) collected from various areas in Thailand. Walailak Journal of Science and Technology. 13 (3): 165-176.
- Toontom, N., Posri, W., Lertsiri, S. and Meenune, M. 2016. Effect of drying methods on Thai dried chilli's hotness and pungent odour characteristics and consumer liking. International Food Research Journal. 23(1):289-299.
- Thongpanja, H. and Meenune, M. 2015. Physical and chemical properties of Hom Bai Toei brown rice during storage. Agricultural Sci. J. 46(3/1):199-202.
- Boonkong, S. and Meenune, M. 2015. Effect of ethylene absorber on the quality and shelf-life assessment in coriander during storage. Agricultural Sci. J. 46(3/1):295-298.
- Naknean, P., Meenune, M. 2015. Impact of clarification of palm sap and processing method on the quality of palm sugar syrup (*Borassus Flabellifer* Linn.). Sugar Tech. 17(2): 195-203.
- Venkatachalam, K. and Meenune, M. 2015. Effect of methyl jasmonate on physiological and biochemical quality changes of longkong fruit under low temperature storage. Fruits. 70(2):69-75.
- Venkatachalam, K. and Meenune, M. 2015. Effect of packaging on postharvest quality changes of longkong fruit. Walailak Journal of Science and Technology. 12(3): 229-236.
- Venkatachalam, K. and Meenune, M. 2014. Physiological changes of longkong fruit during different storage conditions. Advances in Environmental Biology. 8(21): 362-368.
- Keawpeng, I. Charunuch, C., Roudaut, G. and Meenune M. 2014. The optimization of extrusion condition of Phatthalung Sungyod rice extrudate: a preliminary study. International Food Research Journal. 21(6):2399-2304.

- Sangkasanya, S. and Meenune, M. 2014. Formation of volatile flavor compounds in longkong during storage under controlled atmospheric condition combined with intermittent warming treatment. Agricultural Sci. J. 45(3/1):85-88.
- Polthain, K., Phaleang, J. and Meenune, M. 2014. Effect of milling process and parboiling on cooking quality of Sungyod rice. Agricultural Sci. J. 45(3/1):417-420.
- Sangkasanya, S., Lertsiri, S. and Meenune, M. 2014. Changes in fruit quality and volatile flavor compounds during on-tree maturation of longkong. International Food Research Journal. 21(4): 1659-1665.
- Meenune, M., Thongpanja, H. and Kongsuwan, S. 2013. Influence of methyl jasmonate on quality changes in longkong fruit during storage under low temperature. Agricultural Sci. J. 44(3):257-260.
- Naknean, P., Meenune, M. and Roudaut, G. 2013. Changes in properties of palm sugar syrup produced by an open pan and a vacuum evaporator during storage. International Food Research Journal. 20(5):2323-2334.
- Keawpeng, I. and Meenune, M. 2012. Physicochemical properties of organic and inorganic Phatthalung Sungyod rice. International Food Research Journal. 19(3):857-861.
- Venkatachalam, K. and Meenune, M. 2012. Effect of methyl jasmonate on alleviation of chilling injury in longkong fruit during storage. Agricultural Sci. J. 43(3):423-426.
- Toontom, N., Meenune, M. and Posri, W. 2012. Effect of drying method on physical and chemical quality, hotness and volatile flavour characteristics of dried chilli.

 International Food Research Journal. 19(3):1023-1031.
- Venkatachalam, K. and Meenune, M. 2012. Physical and chemical quality changes of longkong (*Aglaia dookkoo* Griff.) during passive modified atmospheric storage. International Food Research Journal. 19(3):795-800.
- Venkatachalam, K. and Meenune, M. 2012. Changes in physiochemical quality and browning related enzyme activity of longkong fruit during four different weeks of on-tree maturation. Food Chemistry. 131:1437-1442.
- Naknean, P. and Meenune, M. 2011. Characteristics and antioxidant activity of palm sugar syrup produce in Songkhla province, Southern Thailand. Asian Journal of Food and Agro-Industry. 4(4): 204-212.

- Keawpeng, I. and Meenune M. 2011. Changes in cooking behavior of organic and inorganic Phatthalung sungyod rice during ageing. Thai Journal of Agricultural Science. 44(5):348-353.
- Laopornsawan, N., Kawerin, W. and Meenune, M. 2011. Effect of some chemical coatings on the quality of minimally-processed longkong. Agricultural Sci. J. 42(3):283-286.
- Sangkasanya, S. Karma, N. Vanakul, N. and Meenune, M. 2010. Changes in quality of longkong (*Aglaia dookkoo* Griff.) for export during storage under the combination of low temperature and packaging. Agricultural Sci. J. 41(1):145-148. (in Thai)
- Toontom, N., Meenune, M. and Posri W. 2010. Consumer preference on flavour profiles and antioxidant information of a Thai chili paste. British Food Journal. 112(11):1252-1265.
- Naknean, P., Meenune, M. and Roudaut, G. 2010. Characterization of palm sap harvested in Songkhla province, Southern Thailand. International Food Research Journal. 17(4):977-986.
- Phaichamnan, M., Posri, W. and Meenune, M. 2010. Quality profile of palm sugar concentrate produced in Songkhla province, Thailand. International Food Research Journal. 17(2):425-432.
- Sangkasanya, S. and Meenune, M. 2010. Physical, chemical and sensory quality of longkong (*Aglaia dookkoo* griff.) as affected by storage at different atmospheres. Asian Journal of Food and Agro-Industry. 3(1):64-74.
- Meenune, M., Karma, N. Vanakul, N. and Sangkasanya, S. 2009. Characteristics of longkong (*Aglaia dookkoo* Griff.) and its flavor formation. Agricultural Sci. J. 40(3):666-669.
- Naknean, P., Meenune, M. and Roudaut, G. 2009. Changes in physical and chemical properties during the production of palm sugar syrup by open pan and vacuum evaporator. Asian Journal of Food and Agro-Industry. 2(4):448-456.
- Naknean, P. and Meenune, M. 2009. Factors affecting retention and release of flavour compounds in food carbohydrates. International Food Research Journal. 17(1):23-34.
- Srivong, T., Meenune M., and Posri, W. 2009. Physical, chemical and sensory changes in organically and conventionally grown Chinese Kale leave during storage. KKU Research Journal. (Graduate Studies). 9:30-45.

- Phaichamnan, M. and Meenune M. 2009. Changes in physical and chemical properties during production of palm sugar concentrate in Singhanakorn district, Songkhla province. Agricultural Sci. J. 40(3):411-424.
- Toontom, N., Meenune M. and Posri, W. 2008. Effects of dry chili and garlic on sensory characteristics and consumer acceptance of numprik Tadang product. KKU Research Journal. (Graduate Studies). 8:7-17.
- Panhor, K., Meenune M. and Manurakchinakorn, S. 2008. Effect of combination of modified atmosphere and low temperature on quality of individual longkong fruit (*Aglaia dookkoo* Griff.) during storage. Agricultural Sci. J. 39(1):19-34.
- Thongdang, T., Meenune, M. and Chainui, C. 2008. Effect of sago starch addition and steaming time on making cassava cracker (keropok). Starch J. 60:568-576.
- Chainui, C. Meenune, M. and Thongdang, T. 2008. Physiochemical properties of cassava and sago starch blends. The Journal of Scientific Research, Chulalongkorn University, (J. Sci. Res. Chula. Univ. Section T). 6(1):55-70.

Conferences/Meeting and Proceeding:

- Bunrat, N. and Meenune, M. 2015. The optimization of spray dried conditions of Phatthalung Sungyod broken rice powder. Proceedings of the 8th International Conference on Starch Technology. 3-4 December 2015. The Sukosol Bangkok hotel, Thailand. Pp. 113-118. (*Poster*)
- Thongpanja, H and Meenune, M. 2015. Physical and chemical properties of Hom Bai Toei brown rice during storage. Proceedings of the 13th National Postharvest Technology conference, 18-19 June 2015. The Greenery Resort hotel, Khao Yai, Thailand. (*Poster*)
- Boonkong, S and Meenune, M. 2015. Effect of ethylene absorber on the quality and shelf-life assessment in coriander during storage. Proceedings of 13th National Postharvest Technology conference, 18-19 June 2015. The Greenery Resort hotel, Khao Yai, Thailand. (*Poster*)
- Toontom, N., Posri, W. and Meenune, M. 2014. Assessing hedonism of hotness and pungent odour intensities in processed dry chilli samples. The 8th International Congress of Food Technologists, Biotechnologists and Nutritionists, 21-24 October 2014. Opatija, Croatia. (*Poster*)

- Toontom, N., Meenune, M. and Posri, W. 2014. Sensory profile analysis of dried Chee fah chilli. The International Bioscience Conference. 2014, Phuket Graceland Resort & Spa hotel, Phuket, Thailand. (*Poster*)
- Toontom, N., Meenune, M. and Posri, W. 2014. Recognition thresholds and liking of sensations derived from capsaicin and one-penten-3-one among chilli users. EuroSense: A sense of life, 7-10 September 2014, Bella Center, Copenhagen, Denmark.
- Sangkasanya, S. and Meenune, M. 2014. Formation of volatile flavor compounds in longkong during storage under controlled atmospheric condition combined with intermittent warming treatment. The 12th National Postharvest Technology conference, 16-18 July 2014. The Empress hotel, Thailand. (*Poster*)
- Polthain, K., Phaleang, J. and Meenune, M. 2014. Effect of milling process and parboiling on cooking quality of Sungyod rice. The 12th National Postharvest Technology conference, 16-18 July 2014. The Empress hotel, Thailand. (*Poster*)
- Kanjanumpha, K. and Meenune, M. 2014. Properties of Phatthalung Sungyod rice as influenced by degree of milling and storage time. Proceeding of the 16th Food Innovation Asia Conference, 12-13 June 2014, BITECH, Bangkok, Thailand. Pp. 458-468. (*Poster*)
- Boonkong, S. and Meenune, M. 2014. Shelf-life assessment and quality changes in coriander during storage under low temperature. Proceeding of the 16th Food Innovation Asia Conference, 12-13 June 2014, BITECH, Bangkok, Thailand. Pp. 557-566. (*Poster*)
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- Naknean, P. and Meenune, M. 2013. Moisture sorption isotherm and glass transition of palm sugar cake as affected by storage temperature. The 2nd International Conference on Nutrition and Food Sciences, 27-28 July, 2013, Moscow, Russia. (*Poster*)
- Naknean, P. and Meenune, M. 2013. Moisture sorption isotherm and glass transition of palm sugar cake as affected by storage temperature. International proceedings of chemicals, biological and environmental engineering: Nutrition and food sciences II. Vol. 53 Iacsit press, Singapore. pp. 66-70.

- Kanjanumpha, K. and Meenune, M. 2013. Physical, chemical and physicochemical properties of Sungyod rice as affected by degree of milling. The 15th Food Innovation Asia Conference, 13-14 June 2013, BITECH, Bangkok, Thailand. (*Poster*)
- Sangkasanya, S., Lertsiri, S. and Meenune, M. 2013. Isolation and identification of volatile flavor compounds in longkong. The 15th Food Innovation Asia Conference, 13-14 June 2013, BITECH, Bangkok, Thailand. (*Poster*)
- Toontom, N., Posri, W. and Meenune, M. 2013. Investigating threshold intensity of hotness and pungent odour perceived by different groups of chilli-users. The 15th Food Innovation Asia Conference, 13-14 June 2013, BITECH, Bangkok, Thailand. (*Poster*)
- Venkatachalam, K. and Meenune, M. 2013. Effect of methyl jasmonate treatment on physiochemical quality. The 15th Food Innovation Asia Conference, 13-14 June 2013, BITECH, Bangkok, Thailand. (*Oral*)
- Naknean, P. and Meenune, M. 2013. Quality of pasteurized palm sap (*Borassus flabelliferLinn*.) collected from various areas in Thailand. The 15th Food Innovation Asia Conference, 13-14 June 2013, BITECH, Bangkok, Thailand. (*Poster*)
- Panhor, K. and Meenune, M. 2012. Effect of antibrowning agents on minimally-processed longkong quality during storage. The 10th National Postharvest Technology conference, 23-24 August 2012. Centrara convention center hotel, Khon Kean, Thailand. (*Poster*)
- Bunrat, N., Kanjanumpha, K., Sea-Lim, S., Keawpeng, I., Meenune, M. and Charunuch, C. 2012. Development of extrudate from Phatthalung Sungyod rice. Proceeding of the 2th National Rice, 21-23 December 2012, Swissotel Le Concorde, Bangkok, Thailand. PP. 601-604. (*Poster*)
- Venkatachalam, K. and Meenune, M. 2012. Effect of methyl jasmonate on alleviation of chilling injury in longkong fruit during storage. The 10th National Postharvest Technology conference, 23-24 August 2012. Centrara convention center hotel, Khon Kean, Thailand. (*Poster*)
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- Naknean, P. and Meenune, M. 2012. Evaluation of antioxidative activity and safety of palm sugar syrup during heating process. Proceedings of the International conference on green and sustainable innovation 2012, 24-26 May 2012, Le Meridian, Chiang Mai, Thailand. (*Poster*)
- Keawpeng, I., Meenune, M., Charunuch, C. and Roudaut, G. 2012. Effect of Free fatty acid and sucrose addition on physicochemical properties of Phatthalung Sungyod rice extrudate. The 6th International Conference on Starch Technology (Starch Update 2011), 13-14 February 2012, Centara Grand at Central Plaza Ladprao, Bangkok, Thailand. (*Poster*)
- Ninsuwan, J., Mesupree, T., Seechamnanturakit, V. and Meenune, M. 2012. Reduction of browning in toddy palm dice during drying process. The 11st National Horticulture Congress, 1-3 February 2012, The Empress, Chaingmai, Thailand. (*Poster*)
- Kama, N., Vanakul, N. and Meenune, M. 2012. Quality of fresh longkong for export and its quality changes during shelf-life extension. The 11st National Horticulture Congress., 1-3 February 2012, The Empress, Chaingmai, Thailand. (*Poster*)
- Venkatachalam, K. and Meenune, M. 2012. Influence of different modified atmospheric packaging on retention of longkong fruit (*Aglaia dookkoo* griff.) quality at room temperature. The International symposium on tropical and subtropical fruits. 19-20 December 2012, Imperial Mae Ping hotel, Chiangmai, Thailand. (*Oral*)
- Toontom, N., Meenune M. and Posri, W. 2011. Detection threshold perceived by light, moderate and heavy chilli users. Program and Abstracts of Commission on Higher Education Congress IV (CHE-USDC Congress IV), 14-16 September 2011, The Zign Hotel. Pataya, Thailand. (*Poster*)

- Venkatachalam, K. and Meenune, M. 2011. Changes of physiochemical and enzyme quality in longkong fruit during four different weeks of on tree maturation. The 13th Asean Food Conference, 16-18 June 2011, BITECH, Bangkok, Thailand. (*Oral*)
- Keawpeng, I., Charunuch, C., Roudaut, G. and Meenune, M. 2011. Effects of extrusion conditions on physicochemical properties of Phatthalung Sungyod rice extrudate. The 13th Asean Food Conference, 16-18 June 2011, BITECH, Bangkok, Thailand. (*Poster*)
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- Venkatachalam, K. and Meenune, M. 2011. Physiological and biochemical quality changes of longkong (*Aglaia dookkoo* Griff.) during passive modified atmospheric package at ambient temperature. The 3rd Biochemistry and Molecular Biology Conference, 6-8 April 2011. The Empress convention center, Chiang Mai, Thailand. (*Poster*)
- Venkatachalam, K. and Meenune, M. 2011. Physical and chemical quality changes of longkong (*Aglaia dookkoo* Griff.) during passive modified atmospheric storage. International Conference on Food Research (ICFR2010), 22-24 November 2010, Marriott Putrajaya, Malaysia. (*Oral*)
- Toontom, N., Meenune, M. and Posri, W. 2010. The effect of drying method on quality, hotness and volatile flavour characteristic of dried chilli. International Conference on Food Research (ICFR2010), 22-24 November 2010, Marriott Putrajaya, Malaysia. (*Poster*)
- Naknean, P., Meenune, M. and Roudaut, G. 2010. Changes in properties of palm sugar syrup produced by an open pan and a vacuum evaporator during storage. The 1st International Congress on Food Technology: Catching the Innovations in Food Science and Technology in the Evolving World, 3-6 November 2010, Antalya, Turkey. (*Poster*)

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- Keawpeng, I., Meenune M. and Charunnuch, C. 2010. Optimized extrusion condition of Phatthalung Sungyod rice extrudate. Proceedings of the first national rice research "Moving rice research toward innovation" conference 15-17 December 2010. Kasetsart University, Bangkok, Thailand. (*Oral*)
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- Keawpeng, I. and Meenune, M. 2010. Physicochemical properties of organic and inorganic Phattalung Sungyod rice. Proceedings of the 12^h Agro-Industrial Conference: Food Innovation Asia Conference. June 17-18, 2010, BITECH, Bangkok, Thailand. (*Oral*)
- Naknean, P., Meenune, M. and Roudaut, G. 2009. Changes in physical and chemical properties during the production of palm sugar syrup by open pan and vacuum evaporator. The 11^h Agro-Industrial Conference: Food Innovation. BITECH, Bangkok, Thailand. (*Poster*)
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- Toontom, N., Meenune, M., Wichaphon, J. and Posri, W. 2009. Flavour profile analysis of Thai chilli paste using GC-MS, E-nose and trained panel. SPISE 2009 Food consumer insights in Asia: Current issues and future, August 7-9, 2009. HoChiMinh City, Vietnam. (*Poster*)
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- Toontom, N., Meenune M. and Posri, W. 2008. Storage effects of fresh chilli and processing effects of Tadang chilli paste on capsaicin content, phenolic compound and antioxidant activity. Proceedings of the 6th Postharvest Technology Conference, 14-15 August. 2008. Charoen Thani Princess. Khon Kaen. (*Oral*)
- Toontom, N., Meenune, M. and Posri, W. 2008. Consumer preference on Tadang chilli paste.

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- Phaichamnan, M. and Meenune, M. 2007. Relationship between sanitation during palm sap processing from Palmyra Palm (*Borassus flabellifer* Linn.) on the quality of palm syrup. In Proceeding of 10th Asia Food Conference 2007: Food for Mankind-Contribution of Science and Technology. 21-23 August 2007. Kuala Lumpur, Malaysia.