รองศาสตราจารย์ ดร. วิสิฐ จะวะสิต E-mail : <u>directnu@mahidol.ac.th</u>



Current Positions :

- Director, Institute of Nutrition, Mahidol University, Thailand
- Associate Professor

Education

Ph.D. (Food Science) Department of Food Science and
Technology, Oregon State University, USA
M.Sc. (Food Science) Department of Food Science and
Technology, Oregon State University, USA
B.Sc. (Food Science and Technology) with honour, Kasetsart
University, Bangkok, Thailand

Research Interests and Expertise

- 1. Functional food product development
- 2. Food Fortification
- 3. Sensory Evaluation
- 4. Appropriate production and quality assurance process for small and mediumscale food producers

National and International Consultancy Positions

2009 Consultant, International Council for the Control of Iodine Deficiency Disorders (ICCIDD) World Bank for Evaluation of Fish Sauce Fortification in 2008 Vietnam 2004 Global Alliance for Improve Nutrition (GAIN) for Evaluation of Fish Sauce Fortification in Vietnam Gesellschaft für Technische Zusammenarbeit (GTZ), 2005 German to Study Iron bioavailability of Fish Sauce Fortification in Cambodian The United Nations Children's Fund (UNICEF) for 2001 Feasibility Study of Fortified Food Products to Solve Malnutrition in Cambodian 1998-Present Subcommittee Member for Food Standard (Milk and Milk product) 1989-Present Theppadungporn Coconut Co. Ltd., Nakhon Pathom, Thailand. 1989-present Projects at the Food and Drug Administration, Ministry of Health, Bangkok, Thailand. 1992-1993 C.P. Food Products, Bangkok, Thailand.

Publications

National Level

- 1. Chavasit V, Teerawat O, Norapoompipat Y, Parinyasiri T. Development of Quality Assurance System for Small-Scale Production of Bottled Drinking Water. Chiang Mai Journal of Science. 2003;30(3):141-52.
- Charoenkiatkul S, Kosulwat V, Chavasit V, Kosulwat S, Rojroongwasinkul N, Boonpraderm A. Nutritive Values of Healthy Thai
 Foods. Journal of the National Research Council of Thailand. 2003:35(1):1-59.
- 3. Kettawan A, Sangpuag P, Sirichakual PP, Chavasit V. Chicken bone calcium extraction and its application as a food fortification. Journal of the National Research Council of Thailand. 2002;34(2):163-80.
- 4. Chavasit V, Chaturachumreonchai W, Kriengsinyos W. Formulation of imitation milk products containing low lactose, high calcium and suitable fatty acid ratio. Mahidol Journal. 1999;6(1):49-54.
- 5. Chavasit V, Srichamreon A. Formulation of coconut milk-substitute Thai desserts containing low saturated, sugar and sodium. Mahidol Journal. 1999;6(1):43-7.
- 6. Chavasit V and Worawongtud W. Characterization and utilization of chitosan produced from shrimp and crab processing shell wastes in Thailand. Thai Fisheries Gazette. 1992;45(6):1099-110.

International level

- 1. Chavasit V, Sirilaksanamanon K, Phithaksantayothin P, Norapoompipat Y, Parinyasiri T. Measures for controlling safety of crushed ice and tube ice in developing country. Food Control. (In press)
- 2. Srichamroen A, Chavasit V. Rheological properties of extracted malva nut gum (Scaphium scaphigerum) in different conditions of solvent. Food Hydrocolloids. 2010: 25 (3): 444-50.
- 3. Chavasit V. Measures for Controlling Safety of Crushed Ice and Tube Ice in Developing Country. Food Control. 2010 (accepted for publication)
- 4. Chanthilath B, Chavasit V, Chareonkiatkul S, Judprasong K. Iodine stability and sensory quality of fermented fish and fish sauce produced with the use of iodated salt. Food and Nutrition Bulletin. 2009; 30(2):183-8.
- 5. Chavasit V. Keys to sustainable food fortification programs in developing countries Comprehensive Reviews in Food Science and Food Safety. 2008;7(4):382-385. (Conference Paper)
- 6. Porasuphatana S, Chavasit V, Vasinrapee S, Suthutvoravut U, Hurrell RF. Production and shelf stability of multiple-fortified quick-cooking rice as a complementary food. Journal of Food Science. 2008;73(7):S359-S366.
- Manger MS, McKenzie JE, Winichagoon P, Gray A, Chavasit V, Pongcharoen T, Gowachirapant S, Ryan B, Wasantwisut E, Gibson RS. A micronutrient-fortified seasoning powder reduces morbidity and improves short-term cognitive function, but has no effect on anthropometric measures in primary school children in northeast Thailand: a randomized controlled trial1– 3. American Journal of Clinical Nutrition. 2008;87:1715–22.
- 8. Puysuwan L, Chavasit V, Sungpuag P, Hediger D, Punvichai T. Feasibility and use of vitamin A-fortified vegetable oils among consumers of different socioeconomic status in Thailand. Food and Nutrition Bulletin. 2007;28(2):181-8.
- 9. Kongkachuichai R, Kounhawej A, Chavasit V, Charoensiri R. Effects of various iron fortificants on sensory acceptability and shelf-life stability of instant noodles. Food and Nutrition Bulletin. 2007;28(2):165-72.
- 10. Chavasit V, Kunhawattana S, Jirarattanarangsri W. Production and contamination of pasteurized beverages packed in sealed plastic containers in Thailand and potential preventive measures. Food Control. 2006;17(8):622-30.
- 11. Winichagoon P, McKenzie JE, Chavasit V, Pongcharoen T, Gowachirapant S, Boonpraderm A, et al. A multimicronutrient-fortified seasoning powder enhances the hemoglobin, zinc, and iodine status of primary school children in North East Thailand: A srandomized controlled trial of efficacy. Journal of Nutrition. 2006;136(6):1617-23. (Conference Paper)
- 12. Watanapaisantrakul R, Chavasit V, Kongkachuichai R. Fortification of soy sauce using various iron sources: Sensory acceptability and shelf stability. Food and Nutrition Bulletin. 2006;27(1):19-25.
- 13. Chitpan M, Chavasit V, Kongkachuichai R. Development of fortified dried broken rice as a complementary food. Food and Nutrition Bulletin. 2005;26(4):376-84.
- 14. Zimmermann MB, Winichagoon P, Gowachirapant S, Hess SY, Harrington M, Chavasit V, et al. Comparison of the efficacy of wheat-based snacks

fortified with ferrous sulfate, electrolytic iron, or hydrogen-reduced elemental iron: Randomized, double- blind, controlled trial in Thai women. American Journal of Clinical Nutrition. 2005;82(6):1276-82.

- Arkarapanthu A, Chavasit V, Sungpuag P, Phuphathanaphong L. Gel extracted from Khruea-ma-noi (Cyclea barbata Miers) leaves: Chemical composition and gelation properties. Journal of the Science of Food and Agriculture. 2005;85(10):1741-9.
- Florentino RF, Underwood B, Hurrell R, Chen J, Junsheng H, Ju N, Khan NC, Van Thuy P, Togami T, Wijaya B, Barba CVC, Winichagoon P, Chavasit V, Kelkar A, Berger J, Chunming C, Rabeneck S. Asian workshop on iron fortification of foods. Asia Pacific Journal of Clinical Nutrition. 2005;14(1):108-10. (Conference Paper)
- Sittikulwitit S, Sirichakwal PP, Puwastien P, Chavasit V, Sungpuag P. In vitro bioavailability of calcium from chicken bone extract powder and its fortified products. Journal of Food Composition and Analysis. 2004;17(3-4):321-9.
- 18. Chavasit V, Nopburabutr P, Kongkachuichai R. Combating iodine and iron Deficiencies through the double fortification of fish sauce, mixed fish sauce, and salt brine. Food and Nutrition Bulletin. 2003;24(2):200-7.
- 19. Chavasit V, Malaivongse P, Judprasong K. Study on stability of iodine in iodated salt by use of different cooking model conditions. Journal of Food Composition and Analysis. 2002;15(3):265-76.
- 20. Chavasit V, Pisaphab R, Sungpuag P, Jittinandana S, Wasantwisut E. Changes in ?- carotene and vitamin A contents of vitamin A-rich foods in Thailand during preservation and storage. Journal of Food Science. 2002;67(1):375-9.
- 21. Chittchang U, Jittinandana S, Sungpuag P, Chavasit V, Wasantwisut E. Recommending vitamin A-rich foods in southern Thailand. Food and Nutrition Bulletin. 1999;20(2):238-42.
- 22. Chavasit V, Tontisirin K. Triple fortification of instant noodles in Thailand. Food and Nutrition Bulletin. 1998;19(2):164-7.
- 23. Chavasit V, Hudson JM, Torres JA, Daeschel MA. Evaluation of fermentative bacteria in a model low salt cucumber juice brine. Journal of Food Science. 1991;56(2):462-465.
- Chavasit V, Antonio Torres J. Chitosan-poly(acrylic acid): Mechanism of complex formation and potential industrial applications. Biotechnology Progress. 1990;6(1):2-6.
- 25. Chavasit V, Kienzle-Sterzer C, Torres JA. Formation and characterization of an insoluble polyelectrolyte complex: Chitosan- polyacrylic acid. Polymer Bulletin. 1988;19(3):223-30.

C. Report and Books

- Chavasit V, Tontisirin K. 1995. Status of food industry in Thailand and its role in supplement of nutritional status of the People. In Report of The Regional Expert Consultation of The Asia-Pacific Network for Food and Nutrition on The Importance of The Food Industry in Increasing Safe Food Supplies. FAO, Regional Office for Asia and The Pacific Region, Bangkok.
- Wasantwisut E, Sungpuag P, Chavasit V, Chittchang U, Jittinanda S, Viriyapanich, T. 1995. Identifying and Recommending Vitamin A Rich Foods in Northeast Thailand. In Empowering Vitamin A Foods: A Food-Based Process for Asia and the pacific Region. Eds: E. Wasantwisut and G.A. Attig. South and East Asia Nutrition Research-cum-Action Network.
- Wasantwisut E, Sungpuag P, Chavasit V, Chittchang U, Jittinanda S, Viriyapanich, T. 1994. Identification of Seasonal Vitamin A Rich Foods and Recommended Methods of Preservation in Northeast Thailand. INMU Special Publication Series No. 5. A joint publication of the UNICEF East Asia & Pacific Regional Office and the Institute of Nutrition, Mahidol University, Salaya, Thailand.
- 4. Nitithamyong A, Chavasit V. 1992. Role of the food industry in improving nutritional status of the people. In The Report of The Regional Expert Consultation of The Asia-Pacific Network for Food and Nutrition on Consolidation of The Technical Input to The International Conference on Nutrition from The Asia-Pacific Region. RAPA Report: 1992/6. Regional Office for Asia and The Pacific (RAPA), FAO, Bangkok.
- Tontisirin K, Winichagoon P, Chavasit V, Yamborisut U. 1992. Supplementary feeding. In Integrating Food and Nutrition into Development: Thailand's Experiences and Future Visions. Chapter 12 P.Winichagoon et al. eds. P.I. Printing, Bangkok.

Research Experiences

- 1. Appropriate production and quality assurance systems for the safety of beverages packed in closed containers produced at cottage industry
- 2. Characterization and utilization of chitosan produced from shrimp and crab processing shell wastes in Thailand
- 3. Development of appropriate production and quality assurance system for the safety of canned bamboo shoot produced at cottage industry
- 4. Development of food products for health throughout the life cycle
- 5. Development of food safety system on appropriate microbial and chemical standards, and measures for consumer safety monitoring by using risk assessment principles
- 6. Development of fortified food products: instant noodle, fish sauces and complementary food
- 7. Development of self-learning media for producers of bottled drinking water

- 8. Facility and knowledge development of producers of ready-to-drink milk as preparation process for mandating GMP regulation of ready-to-drink milk in Thailand
- 9. Formulation of food products for nutrition purposes
- 10. Improvement of meat product quality by mandating Good Manufacturing Practices (GMP) regulation
- 11. Pilot study for safe and economical milk distribution models in primary school in Chiang-Rai
- 12. Potential development for producers of low-acid and acidified food products towards international GMP standard
- 13. Potential development for producers of low-acid and acidified food products
- 14. Situation survey on trans fatty acids contamination in food products in Thailand
- 15. Study and development of production and quality assurance systems for high-risk food products required mandated GMP, that are produced from cottage industries in the north of Thailand
- 16. Study and development of safety quality for beverages packed in closed containers