

Name Pongtorn Sungpuag
พงศธร สังข์เผือก

Email Address pongorn.sun@mahidol.ac.th

Current positions : Associate Professor

Education :

1993 D. Sc. (Nutrition), Mahidol University, Thailand.
1978 M. Sc. (Nutrition), Mahidol University, Thailand.
1972 B. Sc. (Medical Technology), Mahidol University, Thailand.

Training :

1974-1975 Food Analysis, TNO-CIVO Toxicology and Nutrition Institute, Zeist, The Netherlands.
1986 Food Analysis and Food Data System, AFRC Institute of Food Research Norwich Laboratory, Norwich, U.K.
1997 Nutrient analysis and compilation, USDA Beltsville Human Nutrition Research Center, Beltsville, Maryland, U.S.A.

Research Interest and Expertise :

1. Bioavailability of Carotenoids, Flavonoids
2. Antioxidant activity
3. Development of methodology and measurement system to quantify nutrients in foods and diets.

Publications :

National Level:

1. Gowachirapant S, Wasantwisut E, Sungpuag P, Kosulwat V, Tuntipopipat S, Pattanapanyasat K. Effect of carrot consumption on plasma carotenoids and lymphocyte subpopulations in healthy subjects. J Nutr Assoc Thai. 2003; 38: 7-2.
2. Ketawan A, Sungpuag P, Sirichakwal PP, Chavasit V. Chicken bone calcium extraction and its application as a food fortificant. J Nat Res Cou. Thailand. 2002; 34(2): 163-80.
3. Judprasong K, Charoenkiatkul S, Sungpuag P et al. Nutrient composition of milk and milk products. J Nutr Assoc Thai. 2001; 36(1): 17-27.
4. Sungpuag P, Sirichakwal P, Viriyapanich T. Low calories diet. J of Ecology. 1997; 24(2): 73-6. (in Thai).
5. Sungpuag P. Egg. J of Ecology. 1995; 22(3): 105-10. (in Thai).
6. Suphiphat V, Ngunboonsri P, Sungpuag P, Feungpien B. Nutritive value and protein quality of 'Cha-Om' (Acacia pennata subspecies insuavis Nielsen). J Nutr Assoc Thailand. 1990; 24(2): 54-61.
7. Ngunboonsri P, Suphiphat V, Puwastien P, Feungpean B, Sungpuag P. Nutritive value of pupae in bamboo. J Nutr Assoc Thailand. 1989; 23: 185-9. (in Thai).
8. Sungpuag P, Kongkachuichai R. Sodium content of some Thai foods. J Nutr Assoc Thailand. 1985; 19(2): 75-83. (in Thai).
9. Sungpuag P, Patchimasiri S, Yuadyoung S. Comparison of Analysis, Food Exchange and Food Composition Table methods for the determination of Energy and protein in Diets. J Nutr Assoc Thailand. 1985; 19(4): 193-8. (in Thai).
8. Tanphaichitr V, Puwastien P, Sungpuag P, Boonthavi A, Summasut R. "Nutrient composition of Ramathibodi blenderized formula." Intern Med. 1985; 1(2): 85-7.
10. Sungpuag P, Puwastien P, Charoenkiatkul S, Kongkachuichai R. Nutritive values of Foods in the Northeast of Thailand. J Nutr Assoc Thailand 1984; 18(3): 163-76. (in Thai).
11. Sungpuag P, Puwastien P, Charoenkiatkul S, Kongkachuichai R. Composition of Thai Foods : 1. Foods from Cafeteria. J Nutr Assoc Thailand. 1984; 18(4): 266-73. (in Thai).

12. Sungpuag P, Puwastien P. Nutritive value of unconventional protein source : insect. J Nutr Assoc Thailand. 1983; 17(1): 5-12. (in Thai).
13. Sungpuag P, Puwastien P, Charoenkiatkul S, Sirichakwal P, Tontisirin K, Tewtong N. Quality and quantity of Breastmilk in Thai mothers. J Nutr Assoc Thailand. 1983; 17(3): 181-95. (in Thai).
14. Indrambarya V, Puangpet A, Puwastien P, Sungpuag P, Charoenkiatkul S. Utilization of Soybean as Supplement Foods. J Nutr Assoc Thailand. 1982; 16(2-3): 65-95. (in Thai).
15. Puwastien P, Sungpuag P. The determination of antinutritional factors in Soybean and Soybean products. J Nutr Assoc Thailand 1982; 16(4): 231-9. (in Thai).

International Level :

1. Abu Ahmed Shamim, Kerry Schulze, Rebecca D Merrill, Alamgir Kabir, Parul Christian, Saijuddin Shaikh, Lee Wu, Hasmot Ali, Alain B Labrique, Sucheta Mehra, Rolf DW Klemm, Mahbubur Rashid, Pongtorn Sungpuag, Emorn Udomkesmalee, and Keith P West. 2014. First trimester plasma tocopherols are associated with risk of miscarriage in rural Bangladesh. Am J Clin Nutr (*in press*).
2. Judprasong K, Tanjor S, Sungpuag P, Puwastien P. Investigation of Thai plants for potential sources of inulin-type fructans. J Food Comp Anal. 2011; 24: 642-9.
3. Soongsongkiat M, Puwastien P, Jittinandana S, Dee-Uam A, Sungpuag P. Testing of folate conjugase from chicken pancreas vs. commercial enzyme and studying the effect of cooking on folate retention in Thai foods. J Food Comp Anal. 2010; 23:681-8.
4. Kongkachuichai R, Charoensiri R, Sungpuag P. Carotenoid, flavonoid profiles and dietary fiber contents of fruits commonly consumed in Thailand. Int. J. Food Sci. Nutr. Aug. 2010; 61(5): 536-48.
5. Charoensiri R, Kongkachuichai R, Suknicom S, Sungpuag P. 2009. Beta-carotene, lycopene, and alpha-tocopherol contents of selected Thai fruits. Food Chemistry 113: 202-207.
6. Butryee C, Sungpuag P, Chitchumroonchokchai C. Effect of processing on the flavonoids content and antioxidant capacity of Citrus hystrix leaf. International Journal of Food Sciences & Nutrition. 2009; 60 (sup 2): 162-74.
7. Yamborisut U, Sungpuag P, Wimonpeerapattana W. Hypercholesterolemia in Thai primary school children: Relation to maternal and nutritional factors. Pediatrics International 2008; 50(4): 557-62.
8. Gorstein JL, Dary O, Pongtorn, Shell-Duncan B, Quick T, Wasanwisut E. Feasibility of using retinol-binding protein from capillary blood specimens to estimate serum retinol concentrations and the prevalence of vitamin a deficiency in low-resource settings. Public Health Nutrition, 2008; 11 (5): 513-20.
9. Somsub W, Kongkachuichai R, Sungpuag P, Charoensiri R. Effects of three conventional cooking methods on vitamin C, tannin, myo-inositol phosphates contents in selected Thai vegetables. Journal of Food Composition and Analysis. 2008; 21(2): 187-97.
10. Puysuwan L, Chavasit V, Sungpuag P, et al. Feasibility and use of vitamin A-fortified vegetable oils among consumers of different socioeconomic status in Thailand. Food and Nutrition Bulletin. 2007; 28(2): 181-88.
11. Abdullakasim P, Songchitsomboon S, Techagumpuch M, Balee N, Swatsitang P, Sungpuag P. Antioxidant capacity, total phenolics and sugar content of selected thai health beverages. International Journal of Food Sciences and Nutrition. 2007; 58(1): 77-85.
12. Judprasong K, Charoenkiatkul S, Sungpuag P, Vasanachitt K, Nakjamanong Y. Total and soluble oxalate contents in Thai vegetables, cereal grains and legume seeds and their changes after cooking. Journal of Food Composition and Analysis. 2006; 19(4): 340-7.
13. Arkarapanthu A, Chavasit V, Sungpuag P, Phuphathanaphong L. Gel extracted from Khrua-ma-noi (*Cyclea barbata* Miern) leaves: Chemical composition and gelation properties. Journal of the Science of Food and Agriculture. 2005; 85(10): 1741-9.
14. 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.
15. Chavasit V, Pisaphab R, Sungpuag P, Jittinandana S, Wasantwisut E. Changes in β -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.
 16. 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.
 17. Sungpuag P, Tangchitpianvit S, Chittchang U, Wasantwisut E. Retinol and beta carotene content of indigenous raw and home-prepared foods in Northeast Thailand. *Food Chemistry*. 1999; 64(2): 163-7.
 18. Mussaiger AO, Sungpuag P. Composition of mixed dishes commonly consumed in the Arabian Gulf States. *Ecology of Food and Nutrition*. 1985; 16: 153-60.

Abstracts

1. Kerry Schulze, Aaijuddin Shaikh, Abu Shamim, Hasmot Ali, Lee Wu, Parul Christian, Alain Labrique, Rolf Klemm, Sucheta Mehra, Pongtorn Sungpuag, Emorn Wasantwisut, and Keith West. 2014. Micronutrient status during pregnancy and effects of antenatal supplementation with multiple micronutrients versus iron-folic acid in rural Bangladesh. *FASEB J* 28: 804.3.
2. Sungpuag P. 1999. Effect of Cooking and Processing on Fat and Vitamins in Thai food. 1999. Abstract and Symposium Paper presented at 8th Asian Congress of Nutrition. Seoul, Korea. 29 August – 2 September, 1999.
3. Sungpuag P, Wasantwisut E, Chittchang U. 1995. Effect of preparation techniques on vitamin A and B-carotene content of foods in Northeast Thailand. Abstract and poster presented at 7th Asian Congress of Nutrition. Beijing, China October 7-11, 1995.
4. Sungpuag P, Wasantwisut E, Dhanamitta S. Development of a Modified Simplified Dietary Assessment of Vitamin A Consumption in Northeast Thailand. Abstract in XVI IVACG Meeting; 1994 October: Chiang Rai, Thailand.
5. Sungpuag P. Food Source of β -carotene and factor affecting to vitamin A activity in Nutrition for better health. Nutrition Conference 1993, Thailand.
6. Sungpuag P. Nutritive and protein values of some plants. Proceedings of the second ASEAN workshop on Food Analytical Techniques. 1984 March 19-24: Surabaya, Indonesia. p. 140-44.

Reports and Books

In Thai

Sungpuag P, Yuadyong S. Nutrient Composition of Some Foods of the Phi Tong Luang. In: Pookajorn S. Ed. *The Phi Tong Luang (Mlabri): A Hunter-Gatherer group in Thailand*. Bangkok: Amarin Printing Group; 1988. p. 158-60.

In English

Kungsadalampai K, Sungpuag P. *Laboratory Manual for Food Analysis*. Bangkok: Prayurawong; 1984.

Newspaper Articles

1. Sungpuag P. How much nutrients will we got from this menu? In *We love Health*. Moh-Chao-Ban. 1996-7; 18(210-4):10. (in Thai)
2. Sungpuag P. Know before eat: Instant noodle. *Moh-Chao-Ban*. 1992; 13(156): 74-5. (in Thai)

Research Experiences :

1. Effect of cooking on nutrients content in Thai Food.
2. Beta-carotene content in Thai Food.
3. Nutrients analysis of Thai Food.
4. Thai Food Composition Data compilation.
5. Evaluation of food by human study.