BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Booth, Sarah Louise	Scientist I
eRA COMMONS USER NAME	
SBOOTH01	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
McGill University, Montreal, Canada	B.Sc.	1981	Biology
University of London, London, U.K.	M.S.	1986	Nutrition
McGill University, Montreal, Canada	Ph.D.	1992	Nutrition

A. Positions and Honors

Positions and Employment

1988-1991 Research Assistant, School of Dietetics and Human Nutrition, McGill University, Montreal
1992-1996 Research Associate, Vitamin K Laboratory, HNRCA at Tufts University, Boston, MA
1996-2002 Scientist II, Vitamin K Program, HNRCA at Tufts University, Boston, MA
1997-2004 Assistant Professor, Friedman School of Nutrition Science and Policy (FSNSP), Boston, MA
2001- Vitamin K Laboratory Director, HNRCA at Tufts University, Boston, MA
2002-2006 Nutritional Biochemistry and Metabolism Program Director, Tufts University FSNSP, Boston, MA
2002- Scientist I, Vitamin K Program, HNRCA at Tufts University, Boston, MA
2004-2006 Associate Professor, Tufts University FSNSP, Boston, MA
2006- Biochemistry and Molecular Nutrition Program Director, Tufts University FSNSP, Boston, MA
2006- Professor, Tufts University FSNSP, Boston, MA

Honors

1989-1991 International Development Research Council Young Canadian Researchers Award
2000 Pennsylvania State University Ruth Pike Lectureship Honors
2007 American Society of Nutrition E.L.R. Stokstad Award

B. Selected Peer Reviewed Publications (Of 94 Publications)

1. Erkkilä AT, Lichtenstein AH, Dolnikowski GG, Grusak MA, Jalbert SM, Aquino KA, Peterson JW, Booth SL. Plasma transport of vitamin K in men using deuterium-labeled collard greens. Metabolism 2004;53:215-221.
2. Weizmann N, Peterson JW, Haytowitz D, Pehrsson P, de Jesus VP, Booth SL. Vitamin K content of fast foods and snack foods in the US diet. J Food Compos Anal 2004;17:379-384.
3. Booth SL, Golly I, Sacheck JM, Roubenoff R, Dallal G, Hamada K, Blumberg JB. Effect of vitamin E supplementation on vitamin K status in adults with normal coagulation status. Am J Clin Nutr 2004; Jul;80(1):143-8
4. Schultze KJ, O'Brien KO, Germain-Lee EL, Booth SL, Leonard A, Rosenstein BJ. Calcium kinetics are altered in clinically stable girls with cystic fibrosis. J Clin Endocrinol Metabol 2004;89:3385-3391.
5. Cury RC, Ferencik M, Hoffmann U, Ferullo A., Moselewski F, Abbara S, Booth SL, O'Donnell CJ, Brady TJ, Achenbach S. Epidemiology and association of vascular and valvular calcium quantified by multidetector computed tomography in elderly asymptomatic subjects. Am J Cardiol 2004;94:348-351.
6. Braam LAJLM, McKeown NM, Jacques PF, Lichtenstein AH, Vermeer C, Wilson PWF, Booth SL. Dietary phylloquinone intake as a potential marker for a heart-healthy dietary pattern in the Framingham Offspring Cohort. J Am Diet Assoc 2004;104:1410-1414.
7. Booth SL, Broe KE, Peterson JW, Cheng DM, Dawson-Hughes B, Gundberg CM, Cupples LA, Wilson PWF, Kiel DP. Associations between vitamin K biochemical measures and bone mineral density in men and women. J Clin Endocrinol Metab. 2004;89:4904-4909.
8. Erkkilä AT, Booth SL, Hu FB, Jacques PF, Manson JE, Rexrode KM, Stampfer MJ, Lichtenstein AH. Phylloquinone intake as a marker for coronary heart disease risk but not stroke in women. Eur J Clin Nutr. 2005;59:196-204.

9. Damon M, Zhang NZ, Haytowitz DB, Booth SL. Phylloquinone (vitamin K1) content of vegetables. J Food Compos Anal. 2005;18:751-758.
10. Neogi T, Booth SL, Zhang YQ, Jacques PF, Terkeltaub R, Aliabidi P, Felson DT. Low vitamin K status is associated with osteoarthritis in the hand and knee. Arthr Rheum. 2006:54:1255-1261.
11. McLean RR, Booth SL, Kiel DP, Broe KE, Gagnon DR, Tucker KL, Cupples LA, Hannan MT. Association of dietary and biochemical measures of vitamin K with quantitative ultrasound of the heel in men and women. Osteo Intl. 2006; 17:600-607.
12. Ferreira DW, Haytowitz DB, Tassinari MA, Peterson JW, Booth SL. Vitamin K contents of grains, cereals, fast-food breakfasts, and baked goods. J Food Sci. 2006; 71:S66-S70.
13. Elder SJ, Haytowitz DB, Howe J, Peterson JW, Booth SL. Vitamin K contents of meat, dairy, and fast food in the U.S. diet. J Agric Food Chem. 2006;54:463-467.
14. Moselewski F, Ferencik M, Achenbach S, Abbara S, Cury RC, Booth SL, Jang IK, Brady TJ, Hoffmann U. Threshold-dependent variability of coronary artery calcification measurements -- implications for contrast-enhanced multi-detector row-computed tomography. Eur J Radiol. 2006; 57:390-5.
15. Martini LA, Booth SL, Saltzman E, do Rosario Dias de Oliveira Latorre M, Wood RJ. Dietary phylloquinone depletion and repletion in postmenopausal women: effects on bone and mineral metabolism. Osteoporos Int. 2006; 17:929-35.
16. Tovar A, Ameho CK, Blumberg JB, Peterson JW, Smith D, Booth SL. Extrahepatic tissue concentrations of vitamin K are lower in rats fed a high vitamin E diet*. Nutr Metab (Lond). 2006 ;3:29.
17. O'Donnell CJ, Shea MK, Price PA, Gagnon DR, Wilson PW, Larson MG, Kiel DP, Hoffmann U, Ferencik M, Clouse ME, Williamson MK, Cupples LA, Dawson-Hughes B, Booth SL. Matrix Gla protein is associated with risk factors for atherosclerosis but not with coronary artery calcification. Arterioscler Thromb Vasc Biol. 2006;26:2769-74.
18. Dores SM, Booth SL, Aujo Martini L, de Carvalho Gouvea VH, Padovani CR, de Abreu Maffei FH, Campana AO, Rupp de Paiva SA. Relationship between diet and anticoagulant response to warfarin : A factor analysis. Eur J Nutr. 2007; 46:147-154.Holden RM, Morton AR, Boffa MB, Noordhof C, Day AG, Su Y, Miller LM, Koschinsky ML, Booth SL. Subclinical vitamin K deficiency in hemodialysis patients. Am J Kidney Dis. 2007; 49:432-9.
20. Felson DT, Niu J, Clancy M, Aliabadi P, Sack B, Guermazi A, Hunter DJ, Amin S, Rogers G, Booth SL. Low levels of vitamin D and worsening of knee osteoarthritis: results of two longitudinal studies. Arthritis Rheum. 2007; 56:129-36.
21. Booth SL. Vitamin K status in the elderly. Curr Opin Clin Nutr Metab Care. 2007; 10:20-3.
22. Erkkila AT, Booth SL, Hu FB, Jacques PF, Lichtenstein AH. Phylloquinone intake and risk of cardiovascular diseases in men. Nutr Metab Cardiovasc Dis. 2007; 17:58-62.
23. Harrington DJ, Booth SL, Card DJ, Savidge GF, Shearer MJ. Excretion of the urinary %C- and 7C-aglycone metabolites of vitamin K in response to changes in dietary phylloquinone and dihydrophyllquinone intake. J Nutr 2007;137:1763-1768
24. Troy LM, Jacques PF, Hannan MT, Kiel DP, Lichtenstein AH, Kennedy ET, Booth SL. Dihydrophylloquinone intake is associated with low bone mineral density in men and women. Am J Clin Nutr 2007;86:504-8.
25. Shea MK, Booth SL. Role of vitamin K in the regulation of calcification. In: Nutritional Aspects of Osteoporosis.
26. Burckhardt P, Dawson-Hughes B, Heaney RP (Eds). Elsevier B.V. 2007, pp 165-178.
27. Fu X, Booth SL, Smith D. Vitamin K contents of rodent diets: a review. JAALAS 2007;46:8-12.
28. Holden RM, Booth SL. Vascular calcification in chronic kidney disease: the role of vitamin K. Nat Clin Pract Nephrol. 2007; 3:522-3.
29. Felson DT, Niu J, Clancy M, Aliabadi P, Sack B, Guermazi A, Hunter DJ, Amin S, Rogers G, Booth SL. Low levels of vitamin D and worsening of knee osteoarthritis: results of two longitudinal studies. Arthritis Rheum. 2007; 56:129-36.
30. Benjamin EJ, Dupuis J, Larson MG, Lunetta KL, Booth SL, Govindaraju DR, Kathiresan S, Keaney JF Jr, Keyes MJ, Lin JP, Meigs JB, Robins SJ, Rong J, Schnabel R, Vita JA, Wang TJ, Wilson PW, Wolf PA, Vasan RS. Genome-wide association with select biomarker traits in the Framingham Heart Study. BMC Med Genet. 2007 Sep 19;8 Suppl 1:S11.

31. Shea MK, Booth SL, Massaro JM, Jacques PF, D'Agostino, Sr. RB, Dawson-Hughes B, Ordovas JM, O'Donnell CJ, Kathiresan S, Keaney, Jr, JF, Vasan RS, Benjamin EJ. Vitamin K and vitamin D status: Associations with inflammatory markers in the Framingham Offspring Study. Am J Epidemiol 2008;167:313-320.
Shea MK, Benjamin EJ,Dupuis J, Massaro JM, Jacques PF, D'Agostino Sr. RB, Ordovas JM, O'Donnell CJ, Dawson-Hughes B, Vasan RS, Booth SL. Genetic and non-genetic correlates of vitamins K and D. Eur J Clin Nutr 2007 Nov 21 [Epub ahead of print].
32. Wang TJ, Pencina MJ, Booth SL, Jacques PF, Ingelsson E, Lanier K, Benjamin EJ, D'Agostino RB, Wolf M, Vasan RS. Vitamin D deficiency and risk of cardiovascular disease. Circulation 2008 117;503-511.
33. Booth SL, Peterson JW, Smith D, Shea MK, Chamberland J, Crivello N. Age and dietary form of vitamin K affect menaquinone-4 concentrations in male Fischer 344 rats. J Nutr 2008;138:492-496.
34. Booth SL, Dallal G, Shea MK, Gundberg C, Peterson JW, Dawson-Hughes B. Effect of vitamin K supplementation on bone loss in elderly men and women. J Clin Endocrinol Metab 2008 Feb 5 [Epub ahead of print].
35. Blum M, Dolnikowski G, Seyoum E, Harris SS, Booth SL, Peterson J, Saltzman E, Dawson-Hughes B. Vitamin D(3) in fat tissue. Endocrine 2008. March 13 [Epub ahead of print].

C. Research Support

Ongoing Research Support

R01 DK69341 (Booth, PI) 9/30/05-7/31/09
NIH/NIDDK
Dietary & Non-Dietary Components of Vitamin K Metabolism
The major goal of this project is to identify the major determinants of vitamin K absorption and transport.

R01 AG19147 (Booth, PI) 10/1/01-5/31/08
NIH/NIA
Effect of Vitamin K on Age-Related Bone Loss
The major goal of this project is to study the effect of vitamin K supplementation on bone mineral density and bone turnover in older men and women in a 3-year double-blind, placebo controlled randomized trial.

No. 58-1235-6-138 (Booth, PI) 9/29/06-8/31/11
USDA
Vitamin K Analysis of Foods
The objective of this project is to identify and quantify vitamin K and related compounds in representative samples of foods to improve and expand analyses to the USDA Nutrient Databases.

53-3K06-5-10 (Dawson-Hughes, PI) 10/1/07-9/30/08
USDA
Studies of Nutrition and the Aging Skeleton
This funding is generally renewable annually. It supports projects that investigate the scientific basis for setting the calcium, vitamin D and vitamin K intake requirements of adults.
Role: Co-investigator

ASPEN (Saltzman) 03/01/07-02/28/09
Effect of Vitamin K on Insulin Sensitivity
Role: Co-investigator

HHSN268200764317C (Lichtenstein) 1/15/07-4/14/09
Predictive Value of Nutrient Biomarkers for CHD Events
Role: Co-investigator

Completed Research Support

Risk factors for Age-related Bone Loss
Role: Co-Investigator (PI: Kiel D)
NIH/NIAMS RO1-AR41398 Period: 1996-2002

Vitamin K Insufficiency: a Risk Factor for Osteoporosis
Role: PI
NIH/NIA R01 AG14759 Period: 1998-2004

Measurement of natural and synthetic folate in fortified cereal grain products
Role: Co-Investigator (PI: Sehlub J)
NIH/NIDDK R01 DK058715 Period: 2002-2004

Vitamin K Analysis of Foods
Role: PI at Tufts
USDA Cooperative Agreement (No. 58-1235-1-1012) Period: 2001-2006

Vitamin K: Genetics of Calcification
Role: Co-Investigator (PI: Ordovas J)
NIH/NIA R03 Period: 2004-2006

Effect of Vitamin K Supplementation on Osteoarthritis
Role: Co-investigator (PI: Felson D)
Arthritis Foundation Period: 2005-2006

Vitamin K: Vascular Calcification and Age-related Bone Loss
Role: PI
NIH/NHLBI R01 HI-01-014 Period: 2001-2006

Vitamin K and Sulfatides in Brain Aging
Role: Co-Investigator (PI: Crivello N)
NIH/NIA R03 AG025781 Period: 2005-2008