

CURRICULUM VITAE
SAMI A. HASHIM, M.D.

Citizenship: United States

EDUCATION

American University of Beirut	B.A.
American University of Beirut	M.S.
State University of New York At Buffalo School of Medicine (with honors)	M.D.

POSTDOCTORAL TRAINING

Intern in Medicine, Peter Bent Brigham Hospital, Boston, Massachusetts
Assistant Resident to Medicine, Peter Bent Brigham Hospital, Boston
Massachusetts
Research Fellow, Dept. of Nutrition, Harvard University, Cambridge,
Massachusetts
Fellow in Medicine, St. Luke's Hospital Center, New York, NY Fellow of the
National Heart Institute at St. Luke's Hospital Center, New York, NY

PROFESSIONAL APPOINTMENTS

Assistant in Medicine, Peter Bent Brigham Hospital, Boston, Massachusetts
Research Associate, St. Luke's Hospital Center, New York, NY Assistant
Attending Physician, St. Luke's Hospital Center, New York, NY
Associate Attending Physician, St. Luke's Hospital Center, New York, New
York
Director, Division of Metabolism and Nutrition, Department of Medicine, St.
Luke's Hospital Center, New York, NY
1971 - Present Attending Physician, St. Luke's Hospital Center, New York, NY

ACADEMIC APPOINTMENTS

Research Associate, Institute of Human Nutrition Columbia University College
of Physicians and Surgeons, New York
Assistant Professor of Nutrition, Columbia University, College of Physicians &
Surgeons, New York
Associate Clinical Professor of Nutrition, Columbia University College of
Physicians & Surgeons, New York
Associate Professor of Public Health Nutrition, Columbia University College of
Physicians & Surgeons, NY (with tenure)
1978 - Present Professor of Medicine (Nutrition), Columbia University College of Physicians
& Surgeons, NY (with tenure)

Sami Hashim, M.D.

HONORS:

Alpha Omega Alpha Honor Medical Society

SOCIETIES:

American Society for Clinical Investigation
American Federation for Clinical *Research*
American Society for Clinical Nutrition American
Institute of Nutrition
American Association of Clinical Chemists Clinical
Society of New York Diabetes Association Harvey Society
American Association for the Advancement of Science

MISCELLANEOUS:

Member, Editorial Board of American Journal of Clinical Nutrition 1967-1971

Career Development Investigator, National Heart and Lung Institute, National Institutes of Health 1962-1967; 1967-1972

Member, Research Study Committee, American Heart Association 1965-1968

Member, Nutrition Study Section, National Institutes of Health 1968-197

Member, Membership *Committee*, American Institute of Nutrition and American Society for Clinical Nutrition 1975

Member, Special Study Section (Nutrition and Cancer), National Institutes of Health 1976

President (elected), American University of Beirut Alumni Association of North America 1972-1976

Member, Data and Safety Monitoring Committee, Type II Intervention Study, National Heart and Lung 1973-1982 Member, Committee on Low Fat Diet in women at Increased Risk for Breast Cancer, National Cancer Institute, 1984.

Member, Editorial Board, contemporary issues in Clinical Nutrition 1981

Recipient, Distinguished Achievement Award, The 500 Club, Los Angeles, CA, March 1990.

Visiting Professor of Medicine, American University of Beirut, May 1 - May 16, 1997

Visiting Professor of Medicine, American University of Beirut, October, 2004.

Honoree at the 12th Annual St. Luke's and Roosevelt Hospital Gala, May 14, 2009.

Distinguished Alumnus Award, St. Luke's and Roosevelt Hospital Alumni Association, April 18, 2012.

Publications

- Hashim, S.A. A survey of histochemical methods used for the identification of polysaccharides and their derivatives. *Acta Anat.* 16: 356-366, 1952.
- Hashim, S.A. and Acra, A.N. An improved lead tetraacetate: Schiff procedure. *Stain Tech.* 28: 1-8, 1953.
- Hashim, S.A. Feulgen hydrolysis with phosphoric acid. *Ibid.* 28: 27-31, 1953.
- Hashim, S.A., Acra, A.N. Afifi, A.K. and Shanklin, W.M. Concurrent demonstration of desoxyribose nucleic acid and 1, 2 glycols. *Ibid.* 28: 113-118, 1953.
- Hashim, S.A. A study of coronary venous circulation with particular reference to experimental and other occlusions of coronary veins. Thesis, University of Buffalo, School of Medicine, 1955.
- Hashim, S.A. Necrotizing Renal Papillitis: Review and report of a case treated by nephrectomy and complicated by Waterhouse-Friderichsen syndrome. *Diabetes* 7: 114-118, 1958.
- Hashim, S.A. and Clancy, R.E. Dietary fats and blood coagulation. *New Engl. J. Med.* 259:1115-1123, 1958.
- Hashim, S.A., Clancy, R.E., Hegsted, D.M. and Stare, F.J. Effect of mixed fat formula feeding on serum cholesterol level in man. *Am. J. Clin. Nutr.* 7: 30-34, 1959.
- Hashim, S.A. and Van Itallie, T.B. The effect of intravenous amino acids on nonesterified fatty acids. *Proc. Soc. Exp. Biol. & Med.* 100: 576-579, 1959.
- Hashim, S.A. Dietary constituents, lipid metabolism and atherosclerosis. *Resenha Clin. Cien.* 29: 119-125, 1960.
- Hashim, S.A. Endocrine factors in lipids mobilization. *Diabetes* 9: 135-138, 1960.
- Hashim, S.A., Arteaga, A. and Van Itallie, T. B., with the technical assistance of Cozanitis, D. Effect of a saturated medium chain triglyceride on serum lipids in man. *Lancet* I: 1105-1108, 1960.
- Hashim, S.A. The relation of diet to atherosclerosis and infarction. *Am. J. Nursin* 60: 348-352, 1960.
- Van Itallie, T.B., Hashim, S.A., Crampton, R., with technical assistance of Fields, M.C. and Cozanitis, D.A. Enteric sequestration of bile acids in management of patients with primary biliary cirrhosis. *Tr. of Am. Clinical & Climatological Assn.* 72: 97-109, 1960.

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- Hashim, S.A., Pothier, L. and Van Itallie, T.B. Adiposity. Traumatic Medicine and Surgery. Butterworth, London. Vol. 3, part III, chap. 2, 1961.
- Hashim, S.A. and Van Itallie, T.B. Effect of bile acid sequestrant on serum lipids, bile acids pruritus in patients with primary biliary cirrhosis. Fed. Proc. 20: 248, 1961.
- Hashim, S.A. Metabolism of body fat. New York J. Med. 61: 1339-1344, 1961.
- Hashim, S.A. Obesity, drugs and formula diets. Postgrad. Med. 30: 245-250, 1961.
- Van Itallie, T.B., Hashim, S.A., Crampton, R.S. and Tennent, D.M. The treatment of pruritus and hypercholesteremia of primary biliary cirrhosis with cholestyramine. New Engl. J. Med. 265: 469-474, 1961.
- Van Itallie, T.B. and Hashim, S.A. Diet and heart disease. Facts and unanswered questions. J. Am. Dietetic Assn. 38: 531-535, 1961.
- Underwood, B., Hashim, S.A. and Van Itallie, T.B. Effect of diet and intestinal microorganisms on fecal excretion of fatty acids in man. Am J. Clin. Nutr. 9: 249-250, 1961.
- Hashim, S.A. The difficult patient. How do you feed him? Nutr. Rev. 20: 1, 1962,
- Roels, O. and Hashim, S.A. Influence of fatty acids on serum cholesterol. Fed. Proc. 21, No. 4, Suppl. II: 71-76, 1962.
- Tennent, D., Hashim, S.A. and Van Itallie, T.B. Bile acid sequestrants and lipid metabolism. Fed. Proc. 21, No. 4, Suppl. II: 77-80, 1962.
- Hashim, S.A. and Van Itallie, T.B. Experimental steatorrhea in human subjects. Malabsorption Syndromes. 2nd World Cong. Gastroenterol. Karger, Basel, 1963, pp. 26-30.
- Christakis, G. J., Severinghaus, E.L., Maldonado, Z., Kafatos, F., Hashim, S.A. and Van Itallie, T.B. Crete: A study in the metabolic epidemiology of coronary heart disease. Am. J. Clin. Nutr. 12: 337, 1963.

- Christakis, G.J., Rinzler, S.H., Archer, M., Hashim, S.A., Hillman, R.W., and Van Itallie T.B. Effect of a cholesterol-lowering diet on the serum cholesterol, serum triglycerides, serum vitamin A and E levels, and fatty acid composition of subcutaneous fat in man. *Circulation* 28: 703, 1963.
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- Hashim, S.A., Roholt, H.B., Babayan, V.K. and Van Itallie, T.B. Treatment of chyluria and chylothorax with medium chain triglyceride. *New Engl. J. Med.* 270: 756-761, 1964.
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- Hashim, S.A. and Van Itallie, T.B. Clinical and physiologic aspects of obesity. *J. Am. Dietet. Assn.* 46: 15-19, 1965.
- Christakis, G. J., Rinzler, S.H., Archer, M., Hashim, S.A. and Van Itallie, T.B. Effect of a serum cholesterol-lowering diet on composition of depot fat in man. *Am. J. Clin Nutr* 15: 24 - 27, 1965.

Christakis, G.J., Severinghaus, E.L., Maldonado, Z., Kafatos, F.C. and Hashim, S.A. Crete: A study in the metabolic epidemiology of coronary heart disease. *Am. J. Cardiol.* 15: 320-332, 1965.

Hashim, S.A. and Van Itallie, T.B. Cholestyramine resin therapy for hypercholesteremia. *J.A.M.A.* 192: 289-293, 1965.

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Hashim, S.A., Krell, K., Mao, P. and Van Itallie, T.B. Portal venous transport of free pelargonic acid following intestinal instillation of tripelargonin. *Nature* 207: 527-528, 1965.

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Van Itallie, T.B. and Hashim, S.A. Obesity in an age of caloric anxiety. Modern Medicine, November 30, 1970, pp. 89-96.

Tanting^{edh}byangkul, P. and Hashim, S.A. Clinical and physiologic aspects of medium chain triglycerides: Alleviation of steatorrhea in premature infants. Bull. N.Y. Acad. Med. 47: 17-33, 1971.

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Saleh, J.W. and Hashim, S.A. Altered sedimentation behavior and ultrastructure of platelets in hyperlipidemia. Circulation 50: 880, 1974.

Azarnoff, D.L., Casdorff, H.R., Fredrickson, D.S., Hashim, S.A. and Levy, R.I. Meeting the Challenge of the Hyperlipidemias, Health Learning Systems, Bloomfield, N.J., 1975, pp. 1-83.

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- Hashim, S.A. and Porikos, K. Food intake behavior in man: implications for treatment of obesity. *Clinics Endocrinol. & Metab.* 5: 503-516, 1976.
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- Hashim, S.A. Studies of hunger and satiety in man. In: *Nutritional Disorders of Women*, ed. M. Winick, John Wiley, New York, 1977, pp. 107-118.
- Tantibhedhyangkul, P. and Hashim, S.A. Medium chain triglyceride feeding in premature infants: effects on calcium and magnesium absorption. *Pediatrics*: 61: 537-545, 1978.
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- Lavau, M., Fornari, V. and Hashim, S.A. Ketone metabolism in brain slices from rats with diet induced hyperketonemia. *J. Nutr.* 108: 621-629, 1978.
- Hashim, S.A. and Babayan, V.K. Studies in man of partially absorbed dietary fat. *Am. J. Clin. Nutr.* 31, Suppl: 273-276, 1978.
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- Cernansky, G., Liau, D.F., Hashim, S.A. and Ryan, S.F. Estimation of phosphatidylglycerol in fluids containing pulmonary surfactant. *J. Lipid Res.* 21: 1128-1131, 1980.
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Hashim, S.A. Studies of hunger and satiety in man. In: Nutritional Disorders of Women, ed. M. Winick, John Wiley, New York, 1977, pp. 107-118.

Tantibhedhyangkul, P. and Hashim, S.A. Medium chain triglyceride feeding in premature infants: effects on calcium and magnesium absorption. Pediatrics: 61: 537-545, 1978.

Lavau, M. and Hashim, S.A. Effect of medium chain triglyceride on lipogenesis and body fat in the rat. N. Nutr. 108: 613620, 1978.

Lavau, M., Fornari, V. and Hashim, S.A. Ketone metabolism in brain slices from rats with diet induced hyperketonemia. J. Nutr. 108: 621-629, 1978.

Hashim, S.A. and Babayan, V.K. Studies in man of partially absorbed dietary fat. Am. J. Clin. Nutr. 31, Suppl: 273276, 1978.

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Hashim, S.A. Human eating behavior: implications for treatment of obesity. In. Obesity: Pathogenesis and Treatment, ed. G. Enzi, G. Crepaldi, G. Pozza and A.E. Renold, Academic Press, 1981, pp. 225-235.

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Liao, D.F., Hashim, S.A., Pierson, R.N. III and Ryan, S.F. Alcohol-induced lipid change in the lung. J. Lipid Res. 22:680-686, 1981.

Ryan, S.F., Liao, D.F., Bell, A.L.L., Hashim, S.A. and Barrett, C.R. Correlation of lung compliance and quantities of surfactant phospholipids after acute alveolar injury from N-nitroso-N-methylurethane in the dog. Am.Rev.Resp.Dis.123: 200-204, 1981

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Colt, E. and Hashim, S.A.: Effect of exercise and diet on lipids and cardiovascular disease. In: Nutrition and Exercise, Winick, M., ed. Nutrition and Exercise. New York: John Wiley and Sons, 1986: 117-143.

Geliebter, A., Westreich, S., Gage, D. and Hashim, S.A.: Intra-gastric balloon reduces food intake in rats. Am. J. Physiol. 251: R794-R797, 1986

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Geliebter, A., Westreich, S., Hashim, S.A. and Gage, D.: Gastric balloon reduces food intake and body weight in obese rats. Physiol Behav. 39: 399-402, 1987.

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SUMMARY OF RESEARCH WORK
Sami A. Hashim

The observation that patients with high levels of serum cholesterol respond favorably to diets in which the polyunsaturated fatty acid components are diluted 1:1 with saturated fatty acids.

Use of cholestyramine to lower serum cholesterol concentration in patients with hypercholesterolemia.

Use of cholestyramine to relieve the otherwise intractable pruritus associated with cholestasis.

Amelioration of pancreatogenous steatorrhea by means of medium chain triglyceride.

Successful treatment of chyluria, chylothorax, and short bowel syndrome with medium chain triglyceride.

Definition of dietary conditions associated with enrichment of adipose tissue in man with polyunsaturated fatty acids.

A new method for measurement of serum triglycerides.

Production and study of experimental steatorrhea in man by means of cholestyramine. Its alleviation by medium chain triglycerides and Tween 80.

Identification of a new syndrome of edema, dermatitis and hematologic changes in premature infants receiving a high intake of polyunsaturated fatty acids and a low intake of vitamin E.

A new method for measurement of plasma tocopherol.

Direct evidence for portal venous transport of medium chain fatty acids after absorption.

Successful enrichment of depot fat of experimental animals with potentially glucogenic odd-carbon fatty acids, and their use as markers for studies of adipose tissue turnover.

Development and use of an automated food dispensing device to study regulation of food intake in lean and obese human subjects.

The observation that normal lean subjects spontaneously maintain body weight during machine feeding and regulate caloric intake in response to covert changes in nutritive density of the diet.

The observation that obese patients spontaneously curtail caloric intake during machine feeding, lose weight rapidly and fail to adapt to hidden changes in nutritive density.

Use of medium chain triglycerides to induce nutritional

hyperketonemia in the presence of an adequate carbohydrate intake, and the effect of such hyperketonemia on glucose tolerance and insulin secretion.

Enhancing effect of nonanoate (pelargonate) on glucose uptake by adipose tissue.

Definition of the relationship between degree of induced hyperketonemia and insulin secretory response.

Depletion of islet-cell NAD in streptozotocin-induced diabetes. This has been proposed as the likely mechanism for the diabetes.

The amelioration of the "physiological" steatorrhea, and enhancement of calcium and magnesium absorption in premature infants by means of medium chain triglycerides.

Demonstration of lipid-laden buoyant platelets with modified ultrastructure in patients with hyperlipidemia.

Development of an in vivo system for measuring platelet survival in man by use of ^{14}C -serotonin.

Development of a system for measuring platelet aggregation, applicable in epidemiologic studies to test the notion that increased platelet aggregation is a risk factor in atherosclerosis, particularly coronary artery disease.

Diminution of adipose tissue cellularity in the adult rat by feeding medium chain triglyceride as major source of fat early in the life of the infant rat.

Development of saturated long chain triglycerides that are poorly absorbed. These edible fats may offer calori-poor substitutes for ordinary fats.

Quantification of pulmonary surfactant phospholipids.

Demonstration of enhanced thermogenesis induced by feeding medium chain triglycerides.

Development of medium chain triglycerides for use in parenteral alimentation.

Demonstration in the rat that insulin increases body fat despite precise control of food intake and physical activity.

Development of a new non-invasive method for estimation of body composition in the live rat.

Development of a method for non-surgical reduction of gastric capacity (intra-gastric balloon) in rat and man.

Development of a new method for measuring gastric capacity in man.

Development of polysiloxanes as non-caloric fat substitutes.

Characterization of lipoprotein particles in human serum by laser-Doppler refractometry.

Separation of plasma lipoproteins by use of hydrophilic polymer membranes: Potential for selective apheresis of lipids in hyperlipidemia.

Development of a substance (triglyceride of β -hydroxybutyrate) which provides energy to the brain in disorders characterized by diminution in the utilization of glucose for energy by the brain. These disorders include Alzheimer's disease, Parkinson's disease and refractory epilepsy. The substance was approved as GRAS (generally recognized as safe) by an Expert Panel in July, 2016.