

Linda J. Wykes Professor School of Human Nutrition

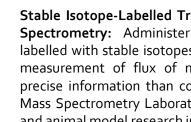
Linda Wykes obtained her PhD from the University of Toronto in 1995. Following her BSc in Nutrition Food Science and Human Physiology at University of Toronto, she gained research experience in the Neonatal Intensive Care Unit at The Hospital for Sick Children. She then developed a piglet model for the human neonate at the University of Guelph. A postdoctoral fellowship at the USDA Children's Nutrition Research Center, Baylor College of Medicine in Houston Texas allowed her to gain expertise in mass spectrometry . She returned to Canada in 1995 to join McGill's School of Dietetics and Human Nutrition. She was awarded a William Dawson Scholar 2001-2012, the Bio-Serv Award of the American Society of Nutrition in 2007, and the New Scientist Award of the Canadian Nutrition Society also in 2007. She was Director of the School of Human Nutrition 2014-2023.





Research and Scientific Expertise

When Nutrition becomes NASTY: The multidisciplinary NASTY Team (Nutrition and Anesthesia during Surgery Team including endocrinologY) develops new nutrition and metabolic based therapies using stable isotope labelled nutrients to help patients recover from the catabolic stress of surgery and critical illness. Dr Wykes specializes in strategies to promote protein synthesis.



Stable Isotope-Labelled Tracer Kinetic Analysis by Mass Spectrometry: Administering glucose or amino acids labelled with stable isotopes in humans and animals allows measurement of flux of metabolites which gives more precise information than concentrations alone. Dr Wykes' Mass Spectrometry Laboratory is the nexus to link human and animal model research in nutrition.

Improving Protein Quality and Developing Novel Substrates to Maximize Protein Synthesis in Enteral and Parenteral Nutrition Support: Matching the composition of nutrition support regimens with metabolic requirements of patients and the limitations of chemistry requires innovative approaches.

Piglet Models to Improve Growth and in Healthy Children and those with Inflammatory Bowel Disease: Dr Wykes' rapidly growing piglet is a model to study the interaction of malnutrition and metabolic stress, which is relevant to IBD in the growing child and other conditions where malnutrition co-exists with inflammation, infection or catabolic stress.

