

Family Relations and Applied Nutrition: MSc, PhD

Applied Human Nutrition

Applied Human Nutrition is a field of study offered by the Department of Family Relations and Applied Nutrition. We are a unique, interdisciplinary academic unit focused on integrating research and practice. Our faculty members conduct applied research that encompasses the continuum of the life cycle in diverse settings, including public health, the community, and clinical settings.

uoguelph.ahn

The field of Applied Human Nutrition (AHN) offers a MSc and a PhD, which involve a combination of course work and a research thesis. In the case of a PhD, the completion of a qualifying exam is also required.

RESEARCH EXPERTISE

Graduate students have opportunities to conduct independent research from inception to analysis in community, lab and clinical settings using nutrition, epidemiological and/or social science methodologies.

ADMISSION REQUIREMENTS

- An honours bachelor's degree, or equivalent
- A minimum 75% average in the last 2 years of study
- Grades of at least 75% in applied statistics and social science research methods courses
- For PhD, master's degree with a research-based thesis in human nutrition or a closely related field

Application Deadline:

January 10, 2026



Aiyu completed her MSc in FRAN in the field of Applied Human Nutrition. She enjoyed her time here and is now working towards her PhD in FRAN. Aiyu's MSc research focused on maternal dietary sugar intake in relation to maternal weight and body composition changes during and after pregnancy. Her PhD study continues exploring the topic of gestational weight gain (GWG) by developing and evaluating a resource booklet to help health practitioners understand how to communicate GWG with pregnant women.

ELIGIBILITY

Individuals from an applied human nutrition discipline and those who have non-AHN backgrounds are encouraged to apply to the MSc and PhD options in the AHN field. We welcome students with diverse backgrounds such as applied human nutrition, nutritional sciences, food science, biomedical science, health promotion, psychology, and kinesiology.

FACULTY

Dr. Andrea Buchholz
 Dr. Dalia El Khoury
 Dr. Laura Forbes
 Dr. Jess Haines
 Dr. Brian Lo
 Dr. Kathryn Walton

ARE YOU INTERESTED IN:

- Community nutrition
- Clinical nutrition
- Nutrition throughout the lifespan
- Physical activity and sports nutrition
- Chronic disease risk
- Food security
- International nutrition

CAREER OPPORTUNITIES:

- Public health nutrition
- Sports nutritionist
- Nutrition program manager
- Research coordinator
- Regional/Public/International health agencies
- NGOs
- UN agencies
- Regulatory affairs
- Academia

CONTACT INFORMATION

Graduate Program Assistant:

Shauna Porter
 519-824-4120 ext 53968
fran.graduate@uoguelph.ca

Applied Human Nutrition Faculty and Research Areas

Andrea Buchholz PhD, RD

As a registered dietitian and Director of the University of Guelph Body Composition Lab, I am interested in the associations between lifestyle habits (particularly diet), body composition and cardiometabolic risk in families with young children. I am a co-investigator of the Guelph Family Health Study (guelphfamilyhealthstudy.com).

Research Interests: Body composition, diet, lifestyle, cardiometabolic risk

Dalia El Khoury PhD, RD

My research interests lie in the areas of: 1. exploring new biomarkers for the metabolic syndrome, and their modulation by functional foods and/or physical activity, both in pediatric and adult populations; 2. investigating the prevalence and psychosocial determinants of dietary supplement use among university athlete and non-athlete students, gym exercisers and other populations at risk; and 3. assessing intake, knowledge and attitude with respect to global food trends such as plant-based diet and gluten-free diet.

Research interests: functional foods; the metabolic syndrome; biomarkers; dietary supplements; athletes, non-athletes, exercisers and other populations at risk; nutrition education; gluten-free diet; plant-based diet

Laura Forbes PhD, RD

My research has two main focuses:

1. Nutrition during pregnancy. Current projects focus on the health effects of dietary sugar intake during pregnancy, gestational weight gain and long term impact of nutrition during pregnancy.
2. Practice-based research in dietetics. I have an ongoing research collaboration with the Waterloo Regional Health Network dietitians. Current projects include research on identification of cancer patients with malnutrition, body composition in kidney disease patients and enteral feeding strategies in the ICU.

Research Interests: nutrition during pregnancy, dietary sugar intake, obesity and diabetes prevention, dietetic practice-based research, clinical nutrition

Jess Haines PhD, RD

My current research is focused on identifying effective strategies to support nutritious and environmentally sustainable eating. I conduct epidemiologic research on the determinants of sustainable eating behaviour and use these results to develop and test behaviour change interventions and knowledge mobilization tools. I am the Co-Director of the Guelph Family Health Study, a family-based cohort study (guelphfamilyhealthstudy.com) and the Principal Investigator of a study testing Supper Heroes, a family-based intervention focused on reducing household food waste and promoting plant-based foods.

Research interests: families, children, nutritious and environmentally sustainable eating, behaviour change interventions, knowledge mobilization

Brian Lo, PhD, RD

As a nutrition and health researcher, I conduct impact-oriented research addressing socioeconomic and environmental influences on food choices and weight-related behaviours using both quantitative and qualitative methods. My current research interests include: 1) the impact of parenthood on fathers' diets and health, 2) fathers' roles in their children's diets and in childhood obesity prevention, and 3) the patient-client relationships between fathers and registered dietitians.

Research interests: community nutrition, fatherhood, parenting, intervention planning and evaluation, minorities' health, obesity prevention

KATHRyn Walton PhD, RD

My research focuses on supporting the development of children's healthy eating habits and growth from infants through to school age. I am particularly interested in helping families with children at high risk of eating difficulties including children born preterm and those with neurodevelopmental disorders. Current projects examine how early life nutrition and parent-child feeding interactions are associated with eating habits, dietary intake and growth during childhood.

Research Interests: pediatric nutrition, parent-child feeding interactions, eating behaviours, preterm birth, neurodevelopmental disorders, family meals, obesity prevention

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