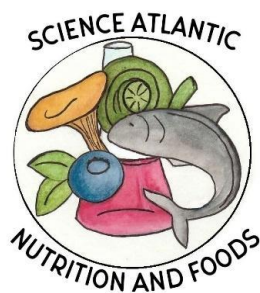




**Science Atlantic Nutrition and Foods 2023
University of Prince Edward Island (Virtual)
April 28, 29, 2023**



Student Abstracts

Listed in the order of presentation:

Oral Presentations Session A (9:30-10:30 AM)

Faculty Facilitator: Dr. Jennifer Taylor

Student Facilitator: Megan Vanderkloet

Presentation 1: Joanne Severe

Presentation 2: Mia Léger

Presentation 3: Megan White

Presentation 4: Khandkar Shaharina Hossain

Oral Presentations Session B (1:00-2:00 PM)

Faculty Facilitator: Dr. Edward Barre

Student Facilitator: Kevin Connelly

Presentation 5: Varleen Kaur

Presentation 6: Megan Churchill

Presentation 7: Sathya Amarasena

Presentation 8: Sarah MacIssac

Enhanced Poster Presentations: (2:30-3:45 PM)

Faculty Facilitator: Dr. Jennifer Taylor

Student Facilitator: Camryn Ramsay

Enhanced Poster 1: Yue Li

Enhanced Poster 2: Tanvi Dabas

Enhanced Poster 3: Gowshigga Thamothersampillai

Enhanced Poster 4: Ilumbavidanalge Dona Thilini Priyabashika Kumarasinghe

Enhanced Poster 5: Ava Rasouli

Enhanced Poster 6: Mahesha Asiriwardhana



Oral Presentations (listed alphabetically):

1. The influence of vitamin B6 deficiency on gut-mediated brain function and behavior in rats

Sathya Amarasena, Graduate Student, Memorial University of Newfoundland

Funding: NSERC and Memorial University of Newfoundland

Supervisors: Mayengbam, Shyamchand

Other authors: Yuan, Qi; Mayengbam, Shyamchand

Introduction: Vitamin B6 is crucial for several metabolic pathways, including energy metabolism, cell signaling, and neurotransmitter biosynthesis. The intestinal microbiota also influences the production of gut-derived neuroactive compounds. We have shown that B6 deficiency alters gut microbiota and gut metabolites. However, the impact of B6 deficiency on the gut-mediated regulation of brain function is poorly understood.

Hypothesis: We hypothesize that B6 deficiency-induced alteration of the gut microbiome can modulate brain function and host behavior by altering gut-controlled neurotransmitter synthesis.

Methods: Sixty-four Sprague-Dawley rats (32F, 32M) were fed either an AIN-93G-based control (B6 7 mg/kg diet) or a vitamin B6 deficient (B6 0.07 mg/kg diet) diet for six weeks. In each diet group, half of the animals received a cocktail of antibiotics through drinking water and weekly gavage, while the other half received regular water. During the 6th week, rats were subjected to behavioral experiments.

Results: The open field maze experiment showed that both Distance Traveled ($p < 0.0001$) and Rearing Time ($p = 0.0351$) were lower in MD-B6 deficient rats compared to the other groups. Similarly, in the elevated plus maze, MD-B6 deficient rats, specifically the females, exhibited significantly lower head dips ($p = 0.028$) than the other rats. The sucrose preference test showed that MD-B6 optimum female rats had the lowest preference over 24 hours ($p = 0.0183$).

Discussion: The microbiota-depleted, B6-deficient conditions show anxiety-like behavior in rats. However, future microbiome and metabolome analyses are required to unravel the underlying mechanisms.

Conclusion: Our study suggests that dietary vitamin B6 deficiency regulates host behavior through the microbiota-gut-brain axis.



2. The antioxidant capacity of breast milk and plasma of women with or without gestational diabetes mellitus

Megan Churchill, Graduate Student, Mount Saint Vincent University

Funding: Canadian Foundation for Dietetic Research (CFDR), Canadian Institutes for Health Research (CIHR), Diabetes Canada, Natural Sciences and Engineering Research Council of Canada (NSERC), Ministry of Education in Saudi Arabia, Committee on Research and Publication Grant, Mount Saint Vincent University.

Supervisor: Grant, Shannan

Other authors: Zawawi, Halah; Elisia, Ingrid; Seider, Maxine; Noseworthy, Rebecca; Thompson, Alexandra; Glenn, Andrea J.; Ramdath, Dan; O'Connor, Deborah; Darling, Pauline; Wolever, Thomas; Barre, Douglas E.; Feig, Denice S.; Kitts, David; Grant, Shannan

Introduction: Women with gestational diabetes (GD) have reduced antioxidant capacity, however, the relationship(s) between maternal diet, maternal biochemical capacity, breast milk concentration, and infant intake remains unclear.

Research Question: How does the antioxidant capacity of women diagnosed with and without GD differ?

Objectives: 1) To assess oxygen radical absorbance capacity (ORAC), and alpha-tocopherol, ascorbic acid, and beta-carotene concentrations in breast milk and plasma in women diagnosed with and without GD. 2) To compare biochemical findings to dietary intake data.

Methods: Plasma and 3-day diet records were collected at 29 weeks' and 35 weeks' gestation, and 6-8 weeks postpartum; breast milk was collected at 6-8 weeks postpartum. Student's t-test was used to compare breast milk ORAC, nutrient antioxidant concentration and plasma ORAC between women with and without GD. Pearson correlations were used to determine associations among antioxidant concentrations in breast milk and dietary antioxidant intake.

Results: Breastmilk and plasma ORAC and antioxidant vitamin concentrations were not significantly different between GD and NG women. Breastmilk antioxidant concentrations were associated with maternal intake of beta-carotene ($r=0.629$, $p=0.005$). Breastmilk ORAC associated with breastmilk alpha-tocopherol for NG ($r=0.763$, $p=0.010$), but not GD women ($r=0.385$, $p=0.35$) and to breastmilk ascorbic acid for GD ($r=0.722$, $p=0.043$) but not NG women ($r=0.141$, $p=0.70$; interaction $p=0.041$). In GD participants, breastmilk ORAC was significantly associated with plasma ORAC ($r=0.780$, $p=0.039$).

Discussion & Conclusions: Despite observing differences in the health status of mothers, mother's antioxidant capacity remains similar. GD does not appear to impact the antioxidant capacity of breast milk or plasma.



3. Vitamin B9 and B12 deficiencies lead to sex-specific alterations in intestinal microbiota and morphology.

Hossain Khandkar, Graduate student, Memorial University of Newfoundland

Funding: Memorial University of Newfoundland, NSERC

Supervisor: Mayengbam, Shyamchand

Other authors: Mayengbam, Shyamchand

Introduction: Vitamins are the organic compounds essential for normal growth and metabolic processes in all living organisms. B vitamins, such as vitamin B9 and B12, act as cofactors in various metabolic reactions, including one-carbon metabolism, and typically require in trace amounts. The gut harbors a diverse population of bacteria, some of which can produce certain vitamins. These bacteria also require certain vitamins for their growth, with requirements varying between vitamin-producing and non-producing strains.

Hypothesis: A deficiency of vitamin B9 and B12 will alter intestinal microbial composition and metabolites, potentially leading to negative impacts on gut health.

Methods: The current study aimed to investigate the impacts of vitamin B9 and B12 deficiencies on gut morphology and microbial profile. A total of 48 Sprague-Dawley rats were fed either a control diet (n=16), a low B9 diet (LB9, n=16), or a low B12 (LB12, n=16) diet for six weeks. Body weights were measured weekly and at the end of the study, blood, tissue, and fecal samples were collected for various biochemical analyses.

Result: Results will be shown in the oral presentation.

Conclusion: Vitamin B9 and B12 deficiencies increase jejunal length, reduce acidic mucin production, increase mucosal height in LB12 group, and alter microbial composition in a sex-specific way.



4. Assessing the impact of shift work on sleep, activity, energy balance and food choice in adults: The SWEAT Study

Varleen Kaur, Graduate student, Memorial University of Newfoundland

Funding: Memorial University of Newfoundland

Supervisor: Harding, Scott V.

Other authors: Harding, Scott V.

Introduction: Shift work is associated with adverse health outcomes such as poor sleep quality, cardiovascular disease, cancer and metabolic syndrome. Shift work-caused disrupted sleep can affect the behavioural regulation of energy intake and expenditure due to circadian rhythm alteration.

Objective: We want to explore some of the factors associated with the risk of adverse health outcomes in workers. We aim to compare lifestyle choices between day workers and shift workers.

Methods: This is a field-based observational study using subjective and objective assessments of sleep and physical activity and two 24-hour online dietary recalls in shift workers. Day (n=11) and night (n=13) workers were recruited and had their free-living sleep and physical activity tracked via accelerometry, and completed two online web-based 24-hour food recall, during a series of work shifts. Along with that, data on chronotype and stress level were also collected.

Results: Our initial analysis shows that there was no statistically significant difference between BMI and body fat% in the two categories. Energy and other macronutrient intakes were not different between the two groups. Day workers had better sleep quality compared to shift workers. Shift workers had a higher score for physical activity.

Conclusion: Future studies should focus on conducting a mixed methodology study with a larger sample size. These observations can help design behavioural interventions to optimize weight management in shift workers.



5. Prevalence of precursor signs of an eating disorder among athletes that practice a weight-sensitive sport at the competitive level

Mia Léger, graduate student, Université de Moncton

Funding: N/A

Supervisors: Tranchant, Carole C.; Ross-Plourde, Mylène

Other Authors: Tranchant, Carole C.; Ross-Plourde, Mylène

Introduction: Like the general population, athletes experience societal pressures to match a socially determined body ideal (Stoyel et al., 2020). However, for athletes, this societal pressure may be worsened with the pressures of sports, creating a situation for the development of eating disorders (Stoyel et al., 2020). According to Bar et al. (2016), athletes who participate in weight-sensitive sports appear to be at increased risk for developing an eating disorder.

Research questions: What is the prevalence of precursor signs of an eating disorder in adults competing in weight-sensitive sports in New Brunswick? Do these athletes have concerns about their body image and does their sport environment contribute to their concerns?

Objective: To obtain knowledge regarding the prevalence of precursor signs of eating disorders and gain insight into the eating preoccupations of adult athletes practicing a weight-sensitive sport, as well as to understand their body image perception.

Methodology: Administer a sociodemographic questionnaire, as well as two previously validated quantitative questionnaires, the Eating Disorder Examination Questionnaire (EDE-Q 6.0) and the Eating Disorders Screen for Athletes (EDSA), which will detect whether different precursor signs of an eating disorder are present in respondents from different high-risk sport categories. These questionnaires will measure dietary concerns, as well as perceived body image. We will also conduct qualitative interviews to allow respondents to elaborate on certain topics, including the sport environment.

Expected outcomes and practical implications: We can expect to have increased awareness of the factors contributing to the development of eating disorders in sports environments.



6. Sensory characterization of a commercial apple butter fruit spread, and various protein-enriched texture modified variations.

Sarah MacIssac, Dietetic intern, St. Francis Xavier University

Funding: National Research Council of Canada Industrial Research Assistance Program (NRC IRAP)

Supervisors: English, Marsha; Harvie, Ruth

Other authors: Yakimets, Chantel; Mackay, Brigid; Neuffer, Madeleine; Ralph, Tylor; MacDonald, Kalli; Viana, Lauren; Harvie, Ruth; English, Marcia.

Introduction: Dysphagia or swallowing difficulties is relatively common in older adults; its management can include texture modified foods (TMF) to ensure safe swallowing. However, TMFs are associated with lower energy and protein intake and poor sensory quality. The research aim was to develop a protein-enriched texture modified apple butter, to analyze the sensory properties and overall acceptability among participants with and without dysphagia.

Methods: In phase one, four variations of bench-top apple butter were made and enriched with pea protein and xanthan gum. Twelve panelists without dysphagia evaluated the sensory characteristics using a 9-point hedonic scale and a Check-All-That-Apply (CATA) questionnaire. In phase two, two variations of enriched bench apple butter were made. Twenty-four panelists living in Long Term Care, 12 with dysphagia and 12 without dysphagia, evaluated the apple butter samples. Acceptability was determined using 4-point graphic scales.

Results: All variations in phase one had similar overall liking and appearance and scored similarly for bolus-forming and thick puree textures. However, two variations were described as leaving a residue after swallowing. The preferred formulation contained 0.1% xanthan gum and 2.1% pea protein. In phase two, both variations had similar findings for both groups in appearance, aroma, taste, texture, and overall liking; one variation described as leaving small amounts of residue. The preferred formulation contained 0.1% xanthan gum and 1.1% pea protein.

Conclusion: Apple butter may be successfully developed as a protein enriched textured modified snack for individuals with and without dysphagia. Further research is required to optimize the formulations for improved consumer acceptability.



7. Mealtime in child care centres: exploring educators' feeding practices

Joanne Severe, Undergraduate student, University of Prince Edward Island

Funding: Canadian Institutes of Health Research Project Grant

Supervisor: Rossiter, Misty

Other authors: Taylor, Jennifer; McIsaac, Jessie-Lee; Rossiter Misty

Introduction: Educators play a key role in the development of children's eating behaviours in early learning settings. However, little is known about the mealtime environment and how educators approach food and feeding in child care centres.

Research statement/Objective: To understand the approach educators take to food and feeding by exploring the factors that influence feeding practices during mealtime in early learning settings.

Methods: Interviews and focus groups were conducted with 26 educators and 4 directors in 7 early learning and child care centres across Prince Edward Island and Nova Scotia. This qualitative descriptive study used an inductive thematic approach for data analysis.

Results: Three main themes emerged from the data: 1) interests during mealtime, 2) resources for feeding and 3) attitudes and beliefs around food and feeding. The findings revealed that educators had unique approaches, with a mix of more responsive and less responsive feeding practices during mealtime. Several educators stated that having a positive atmosphere, building relationships and communicating with the children were of value during mealtimes.

Discussion: The impact of limited observational learning, the importance of up-to-date feeding guidelines, as well as the value attributed to communication and a pleasant atmosphere, were key influencing factors of educators' mealtime practices.

Conclusion: Educators may benefit from workshops/training/programs focusing on responsive feeding practices and creating a supportive mealtime environment. Opportunities to support educators during mealtime, particularly around role modelling would also be valuable due to the important role of educators in shaping the feeding environment of young children.



8. Exploring the role of compassion in 2S/LGBTQ+ Canadians' eating disorder recovery processes

Megan White, Graduate student, Athabasca University; Research Assistant, Mount Saint Vincent University

Funding: Social Sciences and Humanities Research Council (SSHRC)

Supervisor: Joy, Phillip

Other Authors: Aston, Megan; Joy, Phillip

Introduction: 2S/LGBTQ+ people experience higher rates of disordered eating than their cis-heterosexual peers. They also face unique barriers to recovery from eating disorders (ED). Compassion has been shown to have positive impacts on patients' symptom resolution and emotional health. It is unclear how 2S/LGBTQ+ people experience compassion in ED treatment settings, indicating further study to understand its role and how it may be a method for improving delivery of ED recovery resources.

Research question: How do 2S/LGBTQ+ participants perceive the role of compassion in their ED recovery processes?

Objectives: To better understand participants' perceptions of compassion and its role in their ED recovery processes; to explore how compassion may be a way to improve the delivery of ED recovery resources for this population.

Methods: Semi-structured online interviews were conducted with 15 participants self-identifying both as 2S/LGBTQ+ and as having experienced an ED. This qualitative research is guided by post-structuralist and queer theoretical frameworks.

Results: To be discussed in the presentation.

Discussion: This research situates compassion as a method for improving delivery of ED recovery resources for 2S/LGBTQ+ people and for changing heteronormative and homophobic views in ED treatment settings that negatively affect 2S/LGBTQ+ communities' wellbeing.

Conclusions: This research provides important insights on how 2S/LGBTQ+ participants perceive the role of compassion in their ED recovery processes. It also situates compassion as a method for improving the delivery of ED recovery resources for this population and to help change heteronormative and homophobic views within ED treatment settings.



Enhanced Poster Presentations: (listed alphabetically):

1. The uptake of guanidinoacetic acid in the small intestine of neonatal piglets is improved by increasing dietary creatine.

Asiriwardhana Mahesha, Graduate Student, Memorial University of Newfoundland

Funding: NSERC

Supervisor: Bertolo, Robert F.

Other authors: Clancy, Zack; Brunton, Janet A.; Bertolo, Robert F.

Introduction: Creatine and guanidinoacetic acid (GAA) supplements are used to enhance physical performance. GAA is a precursor for creatine which plays a significant role in energy metabolism. There is evidence that supplementing GAA + creatine together further enhances creatine stores, but the mechanism is unclear.

Hypothesis: We hypothesized that the GAA+creatine improves creatine stores by enhancing GAA absorption across the gut when dietary creatine is present.

Methods: Yucatan miniature piglets (n=24) were given a 3-hour duodenal infusion of complete elemental diets with: no GAA; GAA alone; GAA+ creatine; or GAA+ methionine. Tissue samples were collected for creatine analyses, and a section of mid jejunum from control piglets was mounted in Ussing chambers to determine ¹⁴C GAA transport across the small intestine with different GAA:creatine ratios (1:0.3 – 1:3).

Results: Creatine concentration in the liver was highest in GAA + creatine group, suggesting GAA+ creatine improved overall creatine stores. In the Ussing chamber model, ¹⁴C-GAA appearance rate in serosa was highest with 1:3 GAA:creatine, demonstrating that a higher level of creatine enhances GAA absorption across the jejunum.

Conclusion: This study's results help to explain how GAA is transported in the intestine and identify the best supplement combination to increase creatine synthesis, muscle energy, and performance.



2. Dietary vitamin B6 and the pathophysiology of Non-alcoholic fatty liver disease (NAFLD)

Ava Rasouli, Graduate Student, Memorial University of Newfoundland

Funding: Memorial University of Newfoundland

Supervisor: Mayengbam, Shyamchand

Other authors: Harding, Scott V., Booth, Valerie, Mayengbam, Shyamchand.

Introduction: Non-alcoholic fatty liver disease (NAFLD) is a multifactorial disorder affecting many people worldwide. Several studies have indicated the association between dietary micronutrients and the development of NAFLD. For instance, deficiency in vitamin B6 impairs one-carbon (1C) metabolism and triggers fat accumulation.

Objective: The objective of this study was to assess the effects of vitamin B6 supplementation on the progression of NAFLD through its role in 1C metabolism, expecting that micronutrient supplementation prevents or attenuates NAFLD manifestation.

Method: A total of thirty-two male C57BL/6J (B6) mice were fed either control (n=8), high-fat, high-sugar (HFHS, n=8), HFHS high in vitamin B6 (HFHS-HB6, n=8), HFHS low in vitamin B6 (HFHS-LB6, n=8) for eight weeks. Body weights were measured weekly, and urine and fecal samples were collected at three time points. Finally, blood and tissue samples were collected for biochemical analysis.

Results: The body weights of HFHS-LB6 mice were significantly lower compared to the control and HFHS mice ($P < 0.001$). Percent liver weight was significantly higher in the HFHS-LB6 group ($P < 0.001$) compared to the other groups. Jejunum ($P = 0.031$) and Ileum ($P = 0.013$) lengths were increased in the HFHS-LB6 group and HFHS groups, respectively, compared to the other groups. Liver triglyceride concentration was also significantly higher ($P = 0.007$) in HFHS-LB6 group compared to the other groups.

Conclusions: This study suggests that dietary vitamin B6 supplementation does not prevent body weight gain but lowers liver triglyceride content. Other biochemical analyses will be conducted to determine the effects of vitamin B6 on the pathophysiology of NAFLD, including clinical markers and liver metabolites.



3. Don't be salty: An analysis of consumers' salt reduction strategies

Tanvi Dabas, Undergraduate student, Acadia University

Funding: Centre for the Sensory Research of Food

Supervisor: McSweeney, Matthew

Other authors: Le Blanc, Jeanne; McSweeney, Matthew

INTRODUCTION: Recently, obesity and obesity-related illness have become an increasingly prevalent problem in Canada and around the globe. There is a critical need to combat this issue by reducing sugar, salt, and fat consumption. Due to this situation, consumers' attitudes toward salt use have changed.

OBJECTIVE: The objective of this study was to investigate individuals' attitudes towards salt use and identify if they are choosing to reduce salt in their diet.

METHODS: A convenience sample of 193 participants, residing in Atlantic Canada were recruited. Word association tasks were used to identify their attitudes towards salt-reduced foods and high salt food products. An open-ended comment question was used to identify if consumers were reducing salt in their diet and their salt reduction strategies.

DISCUSSION: The participants perceived salt-reduced foods to be healthier than their full salt counterparts, specifically due to their influence on blood pressure reduction. They also considered them to be bland and to lack flavour. Participants also identified beliefs that processed foods are high in salt, with specific attention paid to processed meats, snack foods, French fries, and canned vegetables. Most participants (70% of overall population; 89% of older adults-above 65 years of age) reported they are currently attempting to reduce their salt intake. The most frequently reported salt-reduction strategies included homemade meal preparation, purchasing low sodium labelled foods, reviewing nutrition facts tables, and removing saltshakers from tables at home.

CONCLUSION: Salt reduction is of interest to consumers and most consumers, especially older adults are using salt reduction strategies.



4. *In vitro* and *in vivo* evaluation of wheat and lentil flours of similar particle size

Gowshigga Thamocharampillai, graduate student, Mount Saint Vincent University

Funding: Mount Saint Vincent University and NSERC CRD grant in partnership with Manitoba Pulse Growers, Best Cooking Pulses and Classic Fine Foods.

Supervisor: Luhovyy, Bohdan L.

Other authors: Kathirvel, Priya; Whitfield, Kyly C.; Kaviani, Mojtaba; Luhovyy, Bohdan L.

Introduction: The comparison of food powders and flours regarding their effect on glycaemia is often made without considering their particle size. Previously, we have demonstrated that the particle size of lentil flour (LF) is inversely related to the level of glucose released in a simulated *in vitro* digestion.

Hypothesis: *In vitro* digestion of wheat and lentil flours predicts their glycaemic response. Pizza formulated using LF retains the low-glycaemic properties of lentil flour. **Objective:** To compare LF and wheat flour (WF) on glucose release *in vitro* and glycaemia *in vivo*.

Methodology: Two studies were conducted using WF and LF (superfine grind): (1) *in vitro* digestion of LF and WF using the Englyst method; and (2) *in vivo* evaluation of postprandial glycaemia in 20 young healthy males and females in response to the ingestion of a pizza formulated either with WF, LF, or their equal mixture.

Results: The *in vitro* digestion resulted in a higher glucose area under the curve (AUC) after WF compared to LF over 2h ($P \leq 0.05$). *In vivo* study demonstrated that LF pizza resulted in a lower blood glucose AUC over 3h compared to WF pizza ($P \leq 0.05$).

Discussion: The observed effects of WF and LF on glucose release *in vitro* and glycaemia can be explained by their differences in glycaemic and resistant carbohydrates.

Conclusion: *In vitro* digestion of WF and LF predicts their glycaemic response. Pizza formulated using LF retains the low-glycaemic properties of lentils and results in a lower postprandial response compared to pizza formulated with WF of the same particle size.



5. A mixed lipid emulsion supplemented with antioxidants in PN feeding: preliminary findings

I. D. Thilini P. Kumarasinghe, graduate student, Memorial University of Newfoundland

Funding: Ocean Frontier Institute Vitamin Research Fund

Supervisor: Brunton, Janet A.

Other authors: Wilkins, Simone; Wilkins, Spencer; Bertolo, Robert F.; Brunton, Janet A.

Introduction- Premature infants often require parenteral nutrition (PN) for survival and growth, but PN-related liver disease and gut atrophy are unavoidable adverse consequences.

Hypothesis- Mixed-lipid emulsion (SMOFlipid®) supplemented with additional antioxidant vitamins would reduce markers of liver damage, improve blood flow to the gut, and prevent intestinal mucosal atrophy in newborn piglets receiving prolonged intravenous feeding.

Objective(s) - To determine whether greater antioxidant vitamin availability will lead to higher blood flow to the intestine and result in improved gut and liver morphology when compared to piglets provided the same diets without supplemental Vit E and C.

Methods- Piglets were provided with either Control PN (n = 7) or the same PN diet with vitamin E (10 mg/kg/d) and vitamin C (100 mg/kg/d) added (Vit E&C, n=7).

Results- Results will be shown in the poster.

Discussion- No treatment difference in superior mesenteric artery blood flow was detected.

Mean liver weight for the Control group tended to be higher than the Test group, suggesting that supplementing with Vit E & C may reduce associated liver inflammation and oxidative stress leading to reduced hepatomegaly.

Conclusion- The additional antioxidant nutrients in PN had no effect on blood flow to the gut; the effects of the supplemented PN on liver and GI outcomes are inconclusive. However, future analyses may identify a role for additional vitamins in lipids, ultimately mitigating the adverse effects experienced by neonates treated with PN.



6. Exploring the meaning of acculturation experiences among international students through a Canadian university food-based society with digital storytelling

Yue Li, Graduate Student, Mount Saint Vincent University

Funding: Social Sciences and Humanities Research Council (SSHRC)

Supervisor: Lordly, Daphne

Introduction: International students struggle with many challenges during their acculturation process in Canadian higher education institutions. The Inter-Cultural Food Bridging Society (ICFBS) is an innovative university-based student society that bridges Canadian and international food cultures. The current research aims to explore the impacts of food and the ICFBS food-related activities as international students acculturate.

Research Question: How does participation in a food-based society shape the meaning of acculturation experiences among international students?

Methods: The research is approached qualitatively using Interpretive Phenomenological Analysis (IPA) as a theoretical perspective. A sensory and visual arts-based method—digital storytelling will be applied to better understand, address and engage the lived experiences and realities of the acculturation process of international students.

Results: Data will be generated from the focus group transcripts and field notes. The digital stories will serve as a tool for the participants to explore their perceptions of what is important in relation to the participation of food-related activities during the focus group discussion. The focus group discussion will be held in May 2023.

Conclusion: The international students who participate in the research will have their voices heard to raise awareness that promotes EDI on campus. The research findings will add to current knowledge on acculturation processes and cultural integration, promote initiatives that support international students in higher education institutions, and potentially demonstrate the importance of equity, diversity and inclusion (EDI) on campus and benefit the overall well-being of international students.