

# Picture This: A Photovoice Study Of International Students' Food Experience in Canada

STEPHANIE AMOS, BSc, RD, DAPHNE LORDLY, DEd, Pdt, FDC, Department of Applied Human Nutrition, Mount Saint Vincent University, Halifax, NS

## ABSTRACT

**Purpose:** International student enrolment in Canadian universities is increasing. As international university students acculturate, they experience a culture shock in which food plays a major role. International university students' Canadian food experiences therefore were explored.

**Methods:** A Photovoice methodology was used with 15 international undergraduate and graduate university students, who were recruited to take pictures of their food experiences. They also participated in two focus group discussions that included an analysis of their photos.

**Results:** Seven themes related to the significance of food in acculturation were revealed: the paradox of Canadian convenience, the equation of traditional foods with health, traditional food quality and accessibility, support networks, food consumption for comfort, ethnic restaurants, and the exploration of non-traditional foods. Maintaining cultural identity with traditional foods was an overarching theme related to acculturation.

**Conclusions:** International students acculturating to Canada have emotional and physical needs, which can be met through food. Opportunities exist to improve their acculturation experiences. Canadian universities can incorporate food acculturation strategies into campus events and menus. Nutrition professionals on campus can facilitate a positive food environment and nurture culture identity formation.

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## RÉSUMÉ

**Objectif.** Le nombre d'étudiants étrangers dans les universités canadiennes est en hausse. L'acculturation de ces étudiants est accompagnée d'un choc culturel où les aliments jouent un rôle majeur. Les expériences alimentaires canadiennes des étudiants universitaires étrangers ont été explorées.

**Méthodes.** Une méthodologie Photovoice a été employée auprès de 15 étudiants universitaires étrangers du premier cycle et des cycles supérieurs à qui on a demandé de prendre des photos de leurs expériences alimentaires. Les étudiants ont également participé à deux groupes de discussion lors desquels leurs photos étaient analysées.

**Résultats.** Sept thèmes en lien avec l'importance des aliments dans l'acculturation ont émergé : le paradoxe de la commodité au Canada, l'équation entre les aliments traditionnels et la santé, la qualité et l'accessibilité des aliments traditionnels, les réseaux de soutien, la consommation d'aliments pour le réconfort, les restaurants ethniques et l'exploitation des aliments non traditionnels. Le maintien de l'identité culturelle au moyen des aliments traditionnels était un thème prédominant en ce qui concerne l'acculturation.

**Conclusions.** Au Canada, les étudiants étrangers en période d'acculturation ont des besoins physiques et émotionnels qui peuvent être comblés par les aliments. Or, il existe des façons d'améliorer leur expérience d'acculturation. En effet, les universités canadiennes peuvent incorporer des stratégies d'acculturation alimentaire dans les menus et les événements sur le campus. De plus, les professionnels de la nutrition du campus peuvent favoriser un environnement alimentaire positif de même que la formation de l'identité culturelle.

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## INTRODUCTION

International student enrolment in Canadian universities is increasing (1). As international students acculturate or assimilate to the host country, they may experience culture shock, a disoriented state as a result of moving from a familiar culture to an unfamiliar one (2). Acculturation can be influenced by the time frame of the student's sojourn, the cultural attitudes of both the student and the host country, and the degree of cultural dissimilarities between the student's home country and the host country (2,3). Stress related to culture shock is most prominent

during the initial stage of acculturation (2,4), and may lead to a preoccupation with food (5). Limited access to authentic traditional foods contributes to the stress, and grieving for home can occur (6,7).

Other authors have reported that changes in students' environments are related to increased unhealthy behaviours, including a decrease in overall diet quality (7-10). Brown et al. (11) found that international students' food had significant meaning in terms of memories of their home country, different tastes

in the host country, maintenance of physical health, and eating with others. Little research exists to show how international students are affected by their transition from high school to university or by their sojourn in a new country, or how those factors influence adjustment to food and dietary patterns in the host country. Understanding international students' food experiences can increase knowledge and influence practice decisions that could enhance and improve student experiences.

## PURPOSE

International students' Canadian food experiences were explored through the use of Photovoice, a participatory action, qualitative research method rooted in photo elicitation and ethnography (12).

## METHODS

### Participants

The researcher invited the participation of a convenience sample of 15 undergraduate (n=10) and graduate (n=5) international students attending a 13-week university nutrition bridging program at Mount Saint Vincent University. All program attendees agreed to participate. Informed consent was reviewed orally during class time, and participants subsequently signed consent forms. Six participants were Chinese and nine were Saudi Arabian. The study included 13 women and two men. Participants' ages ranged from 25 to 30. The Mount Saint Vincent University Research Ethics Board approved the study.

### Data collection

Data was gathered from three sources: focus group discussion, photographs, and memos. The researcher scheduled three focus groups. All participants attended two sessions, each approximately 90 minutes long; a third session was cancelled because of attendance issues. All sessions were audiotaped and transcribed using InqScribe 2.2 (Inquirium, LLC, Chicago, IL, 2012).

**The first focus group:** During the first focus group, the researcher facilitated participant introductions and described Photovoice and photo-taking procedures. To create a context for photo taking and inspire critical reflection and discussion, the researcher posed the following major question: "What is your food experience like in Canada?" She also asked four secondary questions:

- "What meaning does food hold for you?"
- "What barriers and facilitators to food preparation do you encounter?"
- "What types of changes have been made to your diet?"
- "How are you adjusting to Canadian food culture?"

Participants adopted and reframed the secondary questions as objectives that guided their photography.

**Photography:** The study included the use of Photovoice, a methodology that allows individuals to identify, reflect upon, and enhance realities within their community (12). The theoretical underpinnings of the method are critical consciousness and feminist theory (12). Participants photograph scenes, people, or objects related to the topic of interest and then discuss the pho-

tos with other participants and the researcher in a group setting. The strength of the method is that it empowers marginalized groups to record visually and discuss social concerns that are then brought forward to policymakers (13). The method is well suited to the exploration of health- and food-related concerns as participants see them, because it provides a lens for viewing participants' perspectives and daily lives (4,14,15).

Using personal digital or cellphone cameras, participants photographed what they perceived demonstrated their food experience in Canada. Each participant took approximately five pictures over 14 days. From the photographs, each participant chose two photos that best represented her or his food experiences. One participant included a photo brought from home. Participants wrote a descriptive caption for all their pictures, using their own words to describe the relevance of the photograph. The photos and captions were emailed to the researcher before the second focus group.

**The second focus group:** During this session, a PowerPoint presentation displayed participant photos. To begin group discussion of each photograph, every participant read his or her descriptive caption. The researcher asked the group to study each photo objectively by asking "What is in this picture?" The question "How does this relate to your food experience in Canada?" enabled participants to make connections between aspects of their own subjective understanding.

**Memos:** The researcher provided sticky notes during both focus groups so that participants could record their feelings and responses to the photograph discussions. These memos provided a discreet way to communicate for participants who may have been hesitant to voice their thoughts.

### Data analysis

Analysis mirrored Wang's participatory method approach to represent participants' food-related experiences creatively (13). Three elements constructed the participatory approach to analysis: selection, contextualization, and coding (16). First, participants took photographs or provided existing photographs, and chose which photos to use in a discussion of their food experiences. Participants then defined the significance of the photograph. Last, participants focused on theme development through discussion. The principal researcher further developed themes through the analysis of memos and the discussion transcription, using an open coding strategy (17). Themes were verified by a second reader and electronically member checked by participants. Data trustworthiness was maintained, following established conventions (18).

## RESULTS AND DISCUSSION

Seven key themes, discussed below, emerged from the data: the paradox of Canadian convenience, the equation of traditional foods with health, traditional food quality and accessibility, support networks, food consumption for comfort, ethnic restaurants, and exploration of non-traditional foods. Maintenance of cultural identity with traditional foods surfaced as an overarching theme.

**Figure 1**

A student's photo representation of and comment on the high sugar content in Canadian foods



"The sugar level of the drinks and jams is higher than my usual intake in my country. In addition, I noticed that lots of juice[s] are not made [with] real fruit, [and] are not healthy enough. Even in jams, the producer[s] often add sugar in their products."

### The paradox of Canadian convenience

Participant discussion focused on the prevalence and availability of Canadian convenience foods and negative experiences associated with an increased intake of these foods. The convenience of food was praised, but not the associated perceived negative health effects. Canadian convenience meant an increased intake of fat and sugar and consumption of larger portion sizes in comparison with their home eating practices; these resulted from higher consumption of snacks, fast food, and beverages. Many experienced weight gain or a fear of weight gain associated with an increased consumption of convenience foods. Figure 1 captures the perceived proliferation of high-sugar foods in Canadian diets.

Other researchers have reported increased consumption of convenience foods and energy-dense foods among international students (2,7-11). Moreover, displacement of healthy foods with similar unhealthy foods of the same food group has been noted (19).

### Equation of traditional foods with health

All international students felt their home country food was healthier than Canadian food. Individual ingredients in traditional dishes were valued for their health benefits. Participants believed cooking for themselves was the best method to ensure that what they ate was healthy. These beliefs created a strong desire to consume traditional foods or organic foods that were perceived as healthy. Some students felt the negative physical health effects of eating Canadian foods. Describing the physical toll on her body, one student commented: "My digestion is not as good as in my country. Yeah, I also find in my stomach, when I..., it's changed to when I speak to some people, like the smell in my mouth is not good."

The study findings are similar to those from previous studies, which suggest international students continue to consume

**Figure 2**

A student's photo representation of and comment on family mealtimes in her home country





**Figure 3**

A student's photo representation of and comment on the importance of food preparation



"I don't like cheese or salad, so I can't have satisfying foods in university. Therefore, I will cook by myself if I have time, and I will bring them to university and reheat them by microwave."

environment in which to communicate with people whose cultures differ in ways other than language and traditions (4,24,25).

### Food consumption for comfort

Participants found consumption of traditional dishes a source of comfort (26). International students are transported to a safe place within the new culture by preparing and eating traditional dishes. Consumption of traditional food acts as a cushion against the loss of familiarity they experience (11). As a result, international students would often prepare traditional meals for school lunches (Figure 3). Brown (8) found that cooking home country food alleviated international students' stress and loneliness. Conversely, consumption of traditional dishes could also increase homesickness (11). In previous studies, international students' avoidance of traditional food and consumption of more host country foods helped minimize homesickness brought on by the nostalgia of eating traditional foods (8,11). The research suggests international students may have conflicted emotions about consuming traditional foods.

### Ethnic restaurants

Participants became very animated when discussing eating out. It was a form of social activity and fulfilled the need to consume traditional cuisine. However, many participants were disappointed by the inauthenticity of the ethnic foods. They were also frustrated by the lack of acknowledgement of religious restrictions around requests for food without pork or alcohol.

Evidence exists of inauthenticity in Canadian ethnic restaurants, as entrepreneurs struggle to meet the needs of two markets: Western and traditional (25). Many entrepreneurs of non-Western ethnicity provide foods to meet Western consumers' needs (22). A dish may have an ethnically appropriate name; however, authentic ingredients are not used or substitutions (to appeal to Western tastes) are made, which result in taste differences (26).

### Exploration of non-traditional foods

Canadian culture provides international students with an opportunity to explore foods not readily available in their home country. Participants commented on the vast array and availability of products in Canada, including cheeses, milk, yogurt, and eggs. One said, "We do not have the variety of cheese as much as in Canada." Another commented, "Egg and milk—the material here is really good." A third stated, "Canada has a variety of ingredients, as well, for example, different kinds of cheese sold in everyday supermarket[s]."

Chinese participants accessed Canadian organic food frequently and praised the greater availability of these products in Canada. International students explored food through the creation of "fusion" dishes, using popular ingredients found in Canadian grocery stores in traditional dishes. The exploration and use of Canadian foods indicate international students' ability to move from their home culture preferences. Jamal (20) attributed students' exploration of mainstream food as a source of adventure and independence from parental control. While international students appreciated traditional foods, they were curious about new tastes.

### Cultural identity and food

The high frequency of traditional foods in the participants' photographs and comparison between Canadian and traditional foods throughout discussion indicated international students had a strong connection to traditional foods and that their cultural identity was connected to these foods. In fact, an overarching theme throughout the data was the association of participants' cultural identity with food (7).

Garza-Guerrero (7) states that culture shock induces a yearning for familiar objects such as food, and explains why international students establish identity through familiar foods as they acculturate. In an effort to maintain their cultural identity, international students use food as a medium to ease insecurities, socialize with others from their home country, and adapt to the expectations of the host culture (7). Typically, participants were proud of their traditional food in comparison with the host country's food. Bochner (2) affirms that this behaviour is a means to fight cultural insecurities in the host country. The reinforcement of acculturation and identity through food is highly dependent on the opportunities to source, cook, eat, and share food with other international students.

### Study limitations

Chinese and Saudi Arabian students were represented in the study. The inclusion of students from additional cultures would enrich the data. Language emerged as a barrier. In response, the lead researcher paid special attention to explaining study objectives clearly and confirming participant understanding throughout the research process. Academic demands influenced study participation; the final focus group session was therefore cancelled. The intent of the third focus group was to review the results with participants to ensure their food experiences were adequately represented and to serve as a platform to discuss how Canadian

universities could better meet international students' food-related needs. While member checking, or participant validation, was accomplished electronically through email, the advocacy interest and contribution from participants was minimal (18).

Finally, the findings represent the experiences of international students at one university. Readers in similar settings may or may not find the results applicable to their own situations (18).

## RELEVANCE TO PRACTICE

International students experience several food-related challenges as they transition to their Canadian studies and life. The study findings suggest current resources could enhance international students' experience. For example, university food integration programs featured as a component of an international student orientation could introduce students to ethnic restaurants, describe features of Canadian cuisine, and explain how to access traditional ingredients. Such programs would celebrate the ethnic diversity of the international student body and reinforce students' personal identity as they acculturate. Nutrition professionals could explore an expanded role for the university cafeteria in providing suitable culturally authentic food choices. The large numbers of international students attending Canadian universities, as well as the importance they place on maintaining a cultural identity through food, indicate the need for increased attention by residence food committees, university international offices, and the international students' academic disciplines in prioritizing these students' food experiences.

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