Transformative Food Journeys on a College Campus: Discourse from the Frontlines of Food and Farming

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When I arrived in Colorado Springs in 2008, Eric Schlosser’s Fast Food Nation [1] drew attention to the sprawling front range, and specifically Colorado Springs – The Olympic City – while famous for their athletes, enormously challenged by poor food and a widening gap between those Coloradans hiking in the mountains and training for performance and the city’s minorities experiencing unsafe and unwalkable neighborhoods with limited access to healthy food.

The Flying Carrot [2] – a sport nutrition graduate student-driven food literacy project—was going to change that. This school bus was supposed to bring fresh food to those in need, offered playfully and athletically with a cooking spoon and taste education and wrapped in “healthy eating – active living” messages so contagious and delicious that it would twist everyone’s heart, wanting to “live like a carrot”. Well, the Flying Carrot did not manage to bring food to those in need, as was the initial intention as a mobile market. However, thanks to the vision of a few community leaders, the Flying “Carrots” —these sport nutrition graduate students—found their road to the regional farms of the Arkansas river watershed just south of Colorado Springs.

The Flying Carrot curriculum is simple: “Take a locally grown vegetable or two, chop it up, then toss to create a Flying Carrot recipe. Once out of the skillet, taste it, then make it. Led by sport nutrition graduate students, the Flying Carrot inspires everyone, promoting literacy around healthy and locally grown food, through taste education and cooking instructions with stories from seed to plate that change the dinner table one carrot at a time.”

Years later, with the carrots having become the community’s food literacy change agents, the catalysts for
local food, and the link between producers and consumers, I reflect deeply on the transformational change that happens when young people step on a farm. Initially, the vision was that nutrition students become the marketing engine for the farmer and promote local food education, while at the same time, they would learn from the farmer where food comes from, when it is in season, and how it is grown. Food literacy from the ground up, so to speak. Thus, this discourse originated from the frontlines of food and farming and the field-based, experiential collaboration amongst nutrition students with the southern Colorado farming community.

The story became profoundly transformational. Little did I know that farm and food experiences for nutrition professionals in training would enrich an already vigorous science curriculum. In fact, this was the missing link! Understanding the soil and regenerative principles and working on the land, seeding out the food that later would get harvested, cooked in the kitchen and shared with peers, not only exploded with flavor and joy around the table, but also triggered a re-imagined understanding of soil-water-plant and food connections. In fact, the personal journeys of sport dietitians, renewing their own relationships with food, became a critical spring board for diffusion of innovation theory [3,4] and the possibility of transforming these farm and food experiences into teachable content and drastically expanding nutrition curriculum, conquering trans-disciplinary boundaries and leaping into agrarian and epicurean disciplines. It seems odd that the curriculum for dietitians would lack such crucial training in local food production and processing, and its integration into dietetics practice, considering the great potential for eating behavior to change for the better.

“So the good and sustainably sourced food that you get when you try to fuel for your sport or the activity you are doing, it has to come from good sources, it has to come from pure sources, and sustainably grown sources, and ethically raised sources because that is what’s going to give you the best nutrients you are going to need to perform, to recover, and to have the strongest immune system you can. On the other side of the spectrum, in hospitals, that’s where the good, local, and sustainable food needs to be because that’s the population that needs it almost more than athletes do because they may face a very traumatic experience whether it’s a heart attack or stroke. Having those high-quality nutrients is really what they need to get their lives on track to help prevent another episode.”

-Graduate Student Leader, Food Next Door

The reductionist approach, focusing on nutrients rather than food, has been most common to date in the field of nutrition sciences, namely to help uncover and describe the mechanism by which nutrients interact with human physiology [5]. While nutrition professionals need to understand this basic (and applied) science, this common repertoire of science will not be enough to tackle today’s multi-dimensional challenges that range across a broad field of inter-connected systems. Systems thinking and trans-disciplinary understanding related to the inter-dependence of ecological health and human wellbeing, in the context of social equity and community prosperity, will be critical for effective treatment and prevention of disease and to promote health and performance [6]. Considering food and farming at the core of this discourse, it should be quite clear that the industrial food system and industrial farming has the potential to diminish the quality of food and damage ecosystem integrity, and therefore, the prospect for a long-term supply of healthy food. The industrial food system has also replaced home economics and with that the knowledge and skills needed to build the tool box for a lifelong healthy relationship with food. Thus, both ends of the spectrum, from production to consumption, will have to be transformed. Interestingly, the return to more sustainable and healthy food systems in itself is educational, nutritious, and can be transformative. Nutrition professionals play a key educator role and will have to discern carefully on how to best approach behavior change in their clients and patients, considering that critical opportunities may be missed if intervention strategies do not include experiences that promote consumer awareness, knowledge, and skills related to their food system. The key is to instill inspiration,
playfulness, and creativity with food, just like the “Flying Carrots” do, while not forgetting to address the threats of food system-related issues of climate change, obesity, and inequality.

“It’s been an eye-opening experience to see the hard work that goes into food and to be able to teach young students, incoming dining staff, and graduate students about what a lemon cucumber looks like, what a chiogga beet looks like, and what a purple carrot looks like— I mean that’s how carrots used to look like and we get to work with them. So, opening students’ eyes to foods and then getting the story of where this food comes from is amazing, and having them make that connection and take those skills with them into the kitchen at their house or for their families in the future.”

-Graduate Student Leader, Food Next Door

That’s food literacy [7]!

While food literacy has been defined variably [8], food system’s integration and the understanding of agricultural production in the context of climate change and health is not always considered. If nutrition professionals ought to be the link between the producer and consumer, just like the “Flying Carrots” succeeded to be, food literacy must expand to food and farm literacy with focus on the intersection of sustainable and regenerative food production and healthful consumption. The dietitian’s discovery of new knowledge and skill acquisition in food production and culinary work, combined with meaningful relationships at the frontlines of food and farming, promote what Hanlon et al., [9] have described as critical for transforming public health. They argue that if global health goals are to be achieved for sustainability, equity, and well-being a new approach will be needed that is embedded in an integrative and ecological framework, is equitable and ethical, allows for creativity and engagement in individual and communal settings, and starts with each professional’s own reflection of values.

I quote Wendell Berry [10] because it so perfectly illustrates that personal journeys precede professional integration. “One must begin in one’s own life the private solutions that can only in turn become public solutions”

The lived experience in farming, gardening, and cooking can also be linked to virtue ethics. Virtue ethics is the quest to understand and live a life of moral character [11].

“For me it comes down to my morals and my ethics how I want to live and how I have been raised.”

-A Local Farmer’s Son

Food ethics have a lot to do with one’s own experience with food – good or bad. Food should not just be a commodity, a thing, or fuel. Students, especially in the sport sciences, who come to experience how food is grown and how much sweat it takes to get the harvest off the field, renew their relationship with food. They begin to understand that getting good food on the table requires time, relationships, integrity, and interdependence. Local food experiences, including the sharing of a meal around the table, gives students a sense of what good life is all about. It is a eudaimonic experience. Eudaimonic is a term that expresses happiness, welfare, or the highest human good [12, 13].

In the paper by Chan et al. [13] nature is illustrated by its intrinsic value independent of humans and by its instrumental value for humans in contrast to numerous relational values, in which nature, the individual, and the human collective interact. When using this paper in the classroom, students attempt to imagine nature’s values in the context of food production and consumption. Students learn to see food beyond its instrumental value as “fuel and nutrients” and re-connect with their own identity and their culture as they go through the exercise. However, it is not until they step on a farm that they understand the bigger context of relating to where food comes from, how it is grown, how it may impact nature positively or negatively, and how hard it is to grow food to feed people. The relational values that ignite when young people break out of their digital worlds and step onto the land is hard to capture.
in words. However, this experience is often highlighted in student evaluations at the end of the course as the most memorable and impactful moment, especially if the farm experience integrated some aspects of planting, cultivating, harvesting, cooking and sharing of or serving a meal. These young people expand their food values beyond seeing food as an instrument to get them faster from start to finish. Farm and food experiences bring back the importance of place and bioregionalism, cultural identity, and connection as previously reported [11].

What students also learn about when stepping on working farms is the inequity in the food system and its people and places, from producer to consumer, as well as for the planet, with the immense environmental impact that originates from industrial agriculture. Students begin to express empathy and gradually mobilize advocacy not only for their own sake but also for others along the food chain. But that’s not all when students step on rural farms. They also experience the urban-rural gap with their own eyes and get a taste for the disparity that exists in rural communities, especially considering food insecurity, obesity, and environmental degradation. Thus, they develop a moral responsibility toward a better, healthier, regenerative, and equitable world.

From my perspective, based on years of observation, farm and food experiences fire up young people’s imagination of how food may integrate into their personal lives and professional work as highlighted by Hanlon et al. [9]. These hands-on experiences with a taste for culture and tradition heal personal food struggles, recover food ways to rebuild community, and regenerate how young people value food. As they get engaged, in classes, as volunteers, and as part of campus initiatives such as the Flying Carrot, and later in internships or apprenticeships, they build knowledge and skills in food systems. The hands-on learning in the field is critical as this shifts their values, while it significantly boosts their self-efficacy in everything that pertains to good food and healthy eating. Thus, food literacy expands to advocacy and food citizenship [14]. Food citizenship is associated with food-related behaviors that support, rather than threaten sustainable food systems. A recent study by O’Kane et al., [15] illustrates significant differences in how people relate to food systems according to where they procure their food. The authors suggest food environments be promoted that help enable food citizenship.

In 2014, the university transitioned its food service away from a corporate system to self-operation, meaning it brought its food in-house. Shortly before this transition, the university built an urban greenhouse and campus farm.

“The vision was born by an administrator who put a large greenhouse here in the winter of 2012. I was hired and began to formulate a vision for how would we build a farm here and what would be its purpose. This campus farm could become more of a farm, demonstrating sustainable farming methods and more about educating folks why food grown in your local soil and at the right time and with organic and sustainable practices is healthier for your body.”

-University Farm Manager

“From 2009 to 2012 many of us pushed for a better food system on campus. Not only me as a faculty on campus. There were multiple of us. Eventually, we had one stakeholder who drove the bus. The university has made a beautiful transition into a self-operated, locally-focused, sustainable food service system. A food service transition to self-operation at a university is enormously powerful in terms of what benefits it can bring. But it does not come without problems. There are many barriers that we still need to overcome in terms of localizing and regionalizing our food system on campus. So, we do go to the Arkansas watershed and work with our farmers and they have been appreciative of the university’s transition. You can imagine that the link between the region’s agriculture and a university can provide a means for farmers because suddenly contracts are interesting. We are trying to feed 10,000 to 12,000 students. Thus, it is an important movement to help farmers get livelihood and meaningful work in the community.”

-Author
“And in the process, teaching these, we lovingly call them the ‘foodies’, the students, a little bit about farming. So, they get right out into the gardening with us and learn to harvest and bring the food in and that gives them great perspectives for just how hard it is to grow your own food. When do you get a carrot and when do you eat greens...As the farm grows we will be able to use every item coming off the farm and develop programming around it.”

-University Farm Manager

With leadership, staff, and faculty involved in developing the vision and securing the budget, and students engaged in focus groups, films, and discussions about the power of food on a college campus, it was quite clear what we wanted. We envisioned to employ students in food service and align the university’s commitments to integrate student life and experiences on campus with academic instruction, while creating a positive dining experience with aim to deepen students’ sense of place on campus and promote community engagement with the regional food system. The transition was also going to ensure nutritious, healthy food was procured from sustainable and value-based food chains [16], prepared from scratch using Menus of Change Principles [17], to promote wellness and sustainability and offer exciting experiential education with better integration and expansion of academic programs focused on food.

In 2012, the university’s Sustainability Office made a concerted effort to integrate food into its strategic plan, focusing on local and sustainable sourcing. In 2013 the university launched “Fooducation” [18], the first large awareness campaign that was connected to gathering data on campus food literacy and student interest in a food revolution. While the customer (student!) largely controls what changes take place on a college campus, without leadership support, financial stability, a certain economy of scale, and academic integration (including faculty and student funding), this transition would not have been possible. Finally, as Wendell Berry points out that we must first find our own solutions before they become public, this food service transition would have not happened without the leader’s own personal food journey that allowed her to re-imagine that healthy, sustainable and delicious food on campus could become students’ health promoting ticket to academic success.

What we were less aware of was related to the needed reskilling of food service personnel not only using scratch cooking but also integrating local food and seasonal menus in a conventional menu-driven system, dealing with the fluctuations of student workers in concert with academic demands, and the need to achieve financial stability before diving too deeply into establishing a distinct food philosophy on campus. Moreover, it has also been challenging to sustain momentum in the face of turnover in food service, leadership, and campus advocacy for better food. The fluctuations in local food availability and distribution problems, with the lingering perceptions that institutional procurement is driven by getting the highest quality of food at the lowest possible price continues to pose difficulties for exactly those value chains that integrate best into academic pathways. Thus, food service transitions should ultimately get institutionalized on a procurement policy level, prioritizing some purchasing directly from small to medium size family farms, farms owned by minorities and women, veterans, food hubs or cooperatives [19] and those providing academically integrated farm experiences [20]. In addition, institutional food service can engage in joint purchasing across institutions, thereby challenging directly the market place of large-scale distributors with procurement strategies that support rather than threaten healthful, sustainable, and ethical food systems.

Food service transitions in institutions have enormous potential to create equity in healthy food access for all students. They are platforms for experiential education and may develop into opportunities for teaching and research between auxiliary services and academic faculty and across disciplines. If such transitions aim to change campus food culture, with a campus farm and goals to increase local procurement from both the campus and regional food system, they are ripe for student engagement in programs such as Food Next Door [21]. –a student-directed local food establishment.
“With Food Next Door we were able to experience working on the campus farm. Every Monday I would go to the farm, harvest the produce, clean the produce and help transport the produce over to our main dining facility. Then coming in later in the afternoon, taking the produce out of the bins and starting to prepare and cook it. So really, I got to see the whole cycle of going from literally in the dirt to the plate for the consumer.”

-Former Graduate Student Leader, Food Next Door

“I went to culinary school and we worked with food all the time but after coming here, I realized that I was working with food the whole time but not really working with food. I knew food but I really did not know FOOD. I can remember that we did not talk about local procurement or the local farms.”

-Graduate Student Leader, Food Next Door

Food Next Door offers student learning experiences that combine farming and gardening in the face of climate change with nutritious, delicious menu design, local procurement problem solving, commercial cooking, serving, and peer advocacy all in one. Food Next Door celebrates its 5th year, having transitioned from a packaged veggie bowl program and retail operation to residential dining, focused on freshmen-level students. Figure 1 depicts Food Next Door’s value-based procurement considerations.

Research on Food Next Door has shown that such experiential learning opportunities build food and farm literacy, shift values, and transform students into food citizens (unpublished observation, N. Meyer, A. Shrader, B. Frieler).

“Being able to learn so much in the kitchen about the seasonality and local food transitioned very nicely into my home life. I was able to go to the farmers market and bring my friends along, and say, ‘oh, I know what every single one of these is on a farm stand and I could tell you a recipe to go with all of them.’ I would have not been able to do that before, even though I did have a strong background in culinary training and sustainability. It just goes to show that learning in the classroom is one thing and hearing about it is one thing, but actually being fully submerged in doing it is another thing.”

Graduate Student Leader 2016, Food Next Door

![Figure 1: Food Next Door values showing the depth of sustainable production and mindful consumption.](image)

*Food Next Door is a student-operated food service station in a residential university dining setting*

Food Next Door engages nutrition undergraduate students as volunteers in a peer-teaching structure, with sport nutrition graduate students mentoring, leading, and managing the operation, under the pressure of campus dining.

“You do things you didn’t think you could do. You didn’t know that you would be able to put in that many hours or come with the things you do. Just the commitment and the management, I think, was really amazing. And you get out of it what you put into it. And I cared a whole lot about it. I would stay awake at night and think about it. I would draw diagrams of how I was going to set up Food Next Door the next day so that when I got there I had that diagram and wasn’t guessing. I would stay up at night and do that and I loved it.”

-Graduate Student Leader 2016, Food Next Door
Food Next Door, while highly popular and an effective co-curricular program with graduate assistantship and volunteer opportunities through campus dining, such programs must find their way through the ebbs and flows of the campus food service culture. Perhaps it is the ability to adapt to change, the feeling of inter-dependence when working together, and the never-ending surprise of the beauty and story of local food that helps these young people to commit, lead and sustain. Food Next Door is only one example of what food service transitions to self-operation in institutions can achieve.

Today, the university farmhouse is a food literacy hub, with programs funded primarily through the Green Action Fund, which is a semester-based sustainability fee from students. The farmhouse is accessible to students, faculty, and staff, and the community. This house is situated next to the campus farm and greenhouse and the sustainability demonstration house and intersects daily on issues of agriculture, nutrition, health, and climate change, offering classes, luncheons, tours, and a weekly summer farm stand with interactive food literacy that makes local food more accessible for students. Developing spaces that can be leveraged as living learning laboratories on and off campus, such as this university’s farmhouse, enables student engagement from seed to plate. This farmhouse has also become a meeting space for faculty and staff in a surprisingly relaxed setting, while offering Food Next Door’s menus catered by dining services. There is no doubt that such unusual institutional settings contribute positively to quality of life.

In 2016, less than 2 years after the university transitioned its food service to self-operation, faculty in Health Sciences put on the university’s first food-focused course called Grain School. Now in its 5th year, Grain School is a 3-day full immersion into the expansive world of heritage and ancient grains along the grain chain, from farming and milling to baking and cooking. This course is a collaboration between academic departments and auxiliary services. Grain School is supported by on-campus entities and external sponsors.

The following quotes are excerpted from student voices regarding the impact of Grain School:

Former Graduate Student Leader, Food Next Door, and dietetic intern: “Your like…oh it’s just grains. There can’t be that much to know about grains.”

Student: “It’s not just grain.”

Student: “I learned a lot of new techniques with different foods and cultures and actually realized the community in food culture is much bigger and broader than what I had originally thought.”

Student: “There is practical hands-on. There is also advocacy. There was chemistry, which was really exciting. There was diet and nutrition, culture, and just a ton more. I learned how to mentor, make tortillas and that was really cool to go back to the grass-roots way of how we should be interacting with food.”

Student: “It’s about making connections, learning from others, and not to use the word education, but it is educational. Oh, it’s just such a different level than just sitting in a lecture, like learning about it. It may open the door to something you did not know you were interested in. It’s important that students learn where food comes from, that it takes a long time to produce food, how much better it tastes, and how much better it is for you.”

Student: “And grain school taught me a lot about that… I guess…to appreciate what we have. They not only give you the knowledge but they put it in your hands. So, you get to take something away from it. So, when you go home you now have all these new recipes and insights.”

Grain School targets students and community members and attracts equal numbers of presenters and workshop leaders to allow for a tiered learning approach. Using the concept of experiential learning [20], students engage in grain production, milling, sourdough baking, and cooking as they learn about the chemistry of cereals, the health impacts of dietary fiber and whole grains, the microbiome, the economics of grain merchants, and the role of grains in climate change.

Grain School initially addressed a shortage of heritage, ancient, and specialty grains in Colorado and has
since developed pathways that assist the Colorado farming community to re-establish grain production and the artisan professions along the Colorado grain chain, and promote grain literacy everywhere! Grain School focuses on improving people’s diets through the introduction of the vast biodiversity of grains, whole-grain nutrition with home-based culinary approaches, and hands-on work with farmers, millers, bakers, and chefs. While grain literacy has not yet been defined, the HEALTHGRAIN Consortium [22] states that “whole grains consist of the intact, ground, cracked or flaked kernel after the removal of inedible parts such as the hull and husk. The principal anatomical components, the starchy endosperm, germ and bran are present in the same relative proportions as they exist in the intact kernel.” Recently, Reynolds et al., [23] published the largest ever conducted synthesis of whole grain and dietary fiber research, evaluating 185 prospective human and 58 clinical trials. Their results show a 15-30% reduction in all-cause cardiovascular disease mortality and incidence of stroke, cardiovascular disease, colorectal cancer, and type II diabetes when meeting the mid to upper range of dietary fiber (25-29g/d) of the Dietary Reference Intakes [24] (DRIs; 19-38g/d), with a dose-response relationship, reducing risk with each additional daily intake of 15 grams. The average American consumes 16g of fiber per day and only 5% of Americans meet the DRIs [25]. To close this fiber gap, grain literacy is needed to educate consumers (and the food chain) on the health benefits of whole, intact grains and flours, their variable flavors and culinary uses, nutritional advantages and changes when fermented (e.g., sourdoughs), and their ecological benefits (e.g., grain in diversified farming systems, drought and pest tolerance).

Grain School is a perfect example of what is possible once an institution changes its food system. However, balancing hands-on learning with vigorous theoretical coursework remains challenging due to the increased workload on faculty, use of campus resources, and extra cost. Thus, such community-based courses are best taught as “special topics” courses so they can be modified with the evolving progress toward healthier and more thriving food systems.

*Food is often thought of as fuel but it is not just fuel. It’s what we need to live. It’s what we need to thrive.*

-Graduate Student Leader, Food Next Door

The idea to connect academics to the change in campus food services was intended to provide place and value-based food experiences from alternative food systems that would not only bring quality of life, wellness, and student success to the forefront, but also allow faculty to collaborate and develop trans-disciplinary and community partnerships to address the threatening predictions of obesity, undernutrition, and climate change and engage in the Great Food Transformation, as recently highlighted by the EAT Lancet Commission [26]. The Commission recommends urgent dietary shifts that consist of mostly plant-based approaches, 50% reduction in foods harmful to people and the planet (e.g., red meat, sugar), a 100% increase in foods good for planet and people (e.g., seasonal vegetables, fruit, legumes, whole grains, seeds, nuts), and a 50% reduction in food losses and waste. If this were achieved by 2050, there would be a 20% reduction in diet-related mortality and a 30-50% reduction in food system-associated greenhouse gas emissions. The commission also recommends to balance healthy dietary approaches with sustainable production, focusing on agricultural priorities that promote healthy food, biodiversity, and conservation strategies that ensures restoration of land and oceans.

The campus-wide Sustainability, Wellness & Learning (SWELL) initiative [27] was created to raise awareness that wellness & sustainability are joint constructs and that personal and planetary health are connected and best addressed together to leverage their co-benefits [28, 29]. The SWELL initiative aligns with the EAT Lancet Commission’s report, focusing on healthy eating from sustainable food systems through SWELL graduate student leadership on and off-campus (see www.uccs.edu/swell). Today, the SWELL initiative is managed by two part-time faculty with a team of students supported by campus dining. Community partnerships have made it possible to expand the university’s food service transition into research
and community-based projects that together address institutional procurement policy from value-based food systems, health and wellness through farm and food literacy and advocacy, and the rebuilding of a heritage grain economy with focus on closing America’s fiber gap and boosting people’s health [23]. Thus, the university’s commitment to good food on campus and this food’s endless ways of teaching brings along with it WIN – WIN – WIN solutions for the health and well-being of the campus and its students, the Southern Colorado community, and nature.

“I don’t have to rely on the main food system. I rely on the local farmers because that’s where I want to put my money because I know that food is better. It’s just a huge transformational experience. And it all started with going to the farms and working with those farmers and going through the program – also the academics and making the connections on campus and being open to any opportunity that is available. That’s what created it. Had I not been part of SWELL or seen the video on the website, I don’t really know where I’d be. I am so much happier—a better person now, I feel like, since I have gone through this. From deep in my soul, it was a life-changing experience.”

-Graduate Student Leader, Food Next Door

RECOMMENDATIONS AND CONCLUSION

To broaden nutrition students’ knowledge and skills in food systems, coursework that includes experiential learning in food and farming, including internships, apprenticeships and fellowships, are needed. However, to develop these courses, community partnerships have to be established that allow students to work in the city (e.g., on campus or community farms, at farmer’s markets, and in campus kitchens) and the countryside (e.g., on production working farms, in food hubs, and processing facilities), so they become part of the food system and understand the link between healthy consumption and sustainable production. Just like the “Flying Carrots”, nutrition professionals can be change agents if they receive opportunities that help broaden their understanding of food in the context of socio-cultural, agricultural, ethical, and ecological contexts. In addition, it is critical that students’ practical experiences in community health settings integrate the local food system and its farmers in the development of programs and services, so they are rich in transformative experiences through food literacy and have the potential to lead to food citizenship, while covertly regenerating healthy, prosperous and sustainable communities.

Changing the food culture on college campuses is challenging yet prosperous, considering its enormous potential for academic integration and co-curricular programming that facilitates students’ farm and food experiences, food access, and complementary education, especially in nutrition sciences and dietetics. In addition, creating hybrid positions for academic professionals who can lead student initiatives, such as SWELL, offer emerging opportunities for trans-disciplinary and community-based research and outreach. Thus, institutions should consider leveraging their food service with a campus farm as living learning laboratory and develop partnerships in food and farming that support the campus food system, faculty engagement, student success, and the viability and sustainability of the surrounding food producing region.

Finally, the field of nutrition sciences never falls short of paradigm shifts and staying up to date is not an easy task for its professionals. Today’s problems, however, in production and consumption of food, require systems thinking and accordingly, collaboration across disciplines, learning with both “heads and hands”, and not forgetting that food is sacred.

References
2. The Flying Carrot Food Literacy Program.
27. Sustainability, Wellness and Learning Initiative (SWELL).
**PEER REVIEW**

Not commissioned. Externally peer reviewed.

**Supplementary Materials:**

Narrate September, 2019; watch the video here:

[https://youtu.be/C9rvfc5eM0M](https://youtu.be/C9rvfc5eM0M)