

Community Gardening in Peterborough: Growing More than Food

Final Report

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Abstract

Community gardening is integral to the creation of sustainable local food systems, providing fresh, healthy, nutritious food, while fostering resilient community spaces. The purpose of this study is to build on existing knowledge about the social benefits of community gardens and explore their application in the context of Peterborough. This research is conducted on behalf of Nourish, a community organization actively working to address food issues. Through this research, the social values of community gardening in Peterborough will help inform Nourish programming, outreach, and future grant proposals. In Peterborough, the unique social benefits experienced by community gardeners revealed a health-conscious orientation, supported by evidence of social cohesion and enhanced food security.

Introduction

In our increasingly globalized, capitalist economy, contemporary social movements have adopted discourses of localization. Specifically, unequal power relations and resource distribution have resulted in new levels of disparity within the global food system (Allen, 2010). In response to the destructive and disempowering impacts of hegemonic agribusiness, food system localization has arisen, working at the community level to create sustainable food alternatives. One manifestation of this effort is community gardening, a branch of urban agriculture integral to the creation of sustainable local food systems, providing fresh, healthy, nutritious food, while fostering resilient community spaces. In Peterborough Ontario, one community organization working to build awareness and action in relation to food issues is Nourish, a collaborative partnership between YWCA Peterborough Haliburton, Peterborough GreenUP, and Peterborough Public Health. The Nourish project aims to address three main challenges entrenched in the local foodscape: 1) lack of access to healthy food for low-income

households, 2) low and shrinking annual income for local farmers and producers, and 3) an economy framed around food as a commodity rather than as a human right (Nourish, 2018). The purpose of this study is to build on existing knowledge about the social benefits of community gardens and explore their application in the context of Peterborough. Further, it will aim to demonstrate the social values of community gardeners growing their own food, helping to inform Nourish programming, and legitimize future grant proposals. Social benefits were explored through three primary themes of social cohesion, food security, and health. To determine potential expression of these three themes in relation to Peterborough, a literature review was undertaken, identifying several secondary themes as points of interest. Secondary themes informed survey questions, and data was collected using an online survey tool.

Background

To determine the motivations associated with community gardening, one must first understand what is involved in the activity. Senes (2016) defines community gardening as, “a piece of land gardened collectively by a group of people that grow their produce on shared lots that have been divided into smaller plots.” Generally, this is how community gardens can be understood, however, reflecting the uniqueness of their respective communities, community gardens are expressed in a variety of ways. For example, Lovell (2014) alternatively claims that community gardens “can be urban, suburban, or rural. [They] can grow flowers, vegetables, or community. [They] can be one community plot, or many individual plots.” Further, Moss (2010) asserts a more holistic perspective claiming that “community gardens are spaces which cultivate health, well-being, knowledge, food security, and connection to the natural environment.” By extension, the term ‘community’ itself is difficult to define, since it is used pervasively in a breadth of sociological and geographical research. Broadly, it has been applied to Alternative

Food Network (AFN) literature, epitomised by concepts including: community food systems, community food security, and community resilience (Firth et al., 2011).

Some scholars have begun to problematize the use of the word ‘community’ in relation to community gardens, since it is not always clear whether the garden is run for the community, by the community, or just located within the community (Firth et al., 2011). As such, community gardens should not be defined by place, but rather by a perception of personal connectedness (Firth et al, 2011). This construction of personal connectedness arises from engagement in social networks; points of interaction brought about by a common purpose. Gardening collectively is one common purpose that Firth (2011) argues builds “strong communities.” I would suggest that “strong communities” can alternatively be considered “resilient communities,” a capacity created through the enhancement of social cohesion, food security, and health. Through these three themes explored through community garden member motivation, this study will contribute to knowledge surrounding the resiliency of Peterborough.

Literature Review

Community gardens are a key piece in creating healthy, sustainable, more resilient communities (Lanier et al., 2015). By engaging with community garden initiatives, members are exposed to knowledge networks about nutrition, seasonality, and local ecology (Furness & Gallaher, 2018). Further, economic self-sufficiency is fostered, increasing food security, while enabling community members to reduce the impact of climate change in their cities (Corrigan, 2011; Furness & Gallaher, 2018). In addition to providing economic, environmental, and health benefits, community gardens also function as important hubs for community engagement, promoting a greater sense of community. For example, this is illustrated by Veen et al. (2016), who describes community gardens as a “third place” in the public realm; a setting beyond home

and work where people can regularly interact, enhancing social life in urban neighborhoods, and stimulating bonds between residents.

The study conducted by Veen et al. (2016), investigates the contribution of community gardens to the development of social cohesion, and the added values of participation, even by those primarily motivated by growing vegetables. Notably, beautification emerged as an added value contributing to place attachment, both for gardeners and local residents not involved in the garden (Veen et al., 2016). Similarly, Firth et al. (2011), emphasizes the ability of community gardens to “link” community garden members not only to each other, but to the local community as a whole. Consequently, one of the aims of this study is to examine the contribution of community gardens to social cohesion and place attachment in the Peterborough community.

By 2050, 67% of the global population will live in urban areas, making food security an increasingly urban issue (Opitz et al., 2016). In the past, community garden literature has mainly addressed a broad range of societal issues. However, in light of imminent urban population increases, recent publications have shifted to discourses surrounding food sovereignty, community food security, and environmental justice (Furness & Gallaher, 2018). For instance, Community Food Security (CFS), has been widely accepted as a strategy to address food insecurity, attempting to ensure that all community members obtain enough nutritious, and culturally appropriate food, while incorporating environmentally sustainable techniques (Corrigan, 2011). One application of the CFA strategy is through the establishment of community gardens. Through community gardening, access to fresh food is improved during the growing season, and the benefits can interestingly be carried on throughout the year (Corrigan, 2011). For example, preservation techniques such as canning and freezing can be utilized to extend the period of time within which produce can be consumed (Corrigan, 2011). Though

studies have identified preservation techniques as a potential method to increase food security, none have examined whether these techniques are put into practice. As a result, this study will endeavour to paint a picture of community gardening in Peterborough, using preservation techniques as one point of entry into the level of food security provided by community gardens.

Predominately, community gardening literature addresses the associated health benefits of involvement. According to a Toronto case study by Wakefield et al. (2007), community gardens were perceived by gardeners to provide several health benefits including: improved nutrition, increased physical activity, and improved mental health. While this study focuses on health benefits to humans from a social science perspective, it is important to note that community gardens also contribute to greater ecological health by supporting biodiversity (Beilin & Hunter, 2011).

Methods

As a result of the exploratory nature of this research, a semi-interpretative methodology was applied, allowing themes to emerge from the lived experiences of community gardeners. This qualitative approach positioned human actors at the center of research design, reinforcing a truly community-based approach. Themes emerging from the literature review were interrelated, providing the impetus to separate them into primary and secondary themes. Secondary themes were identified as points of interest, and composed of social outcomes associated with community gardening. Secondary themes were integrated into survey questions, allowing for insight into the expression of primary themes in Peterborough (see Table 1). The survey was created using the survey tool Qualtrics™, and a link to the survey was distributed via e-mail networks. This included community gardens with accessible contact information (Trent Vegetable Gardens, King Edward Community Garden), and the social media platforms of

Nourish. The survey was open for 24 days (February 6-March 12, 2018). In addition, flyers containing a link to the online survey were distributed door-to-door in neighborhoods of interest identified by the host organization. One hundred flyers were distributed in the Avenues (Pearl Ave, Maitland Ave, Elias Ave, Charlotte Street), and Bonnaccord St. In total, 47 respondents participated in the survey.

Results

In relation to the primary theme of health, survey data revealed an emphasis on active lifestyles and healthy eating. For example, the greatest percentage of community gardeners responded that their involvement has led to changes in their diet or health, specifically that they eat more fruits and vegetables (see Table 2). Further, about half of survey respondents either walk and/or bike to their garden, despite the largest group responding that they live over a 20-minute walk away (see Table 2). In terms of the primary theme of social cohesion, place attachment, and a sense of community emerged as important secondary themes. For instance, most survey respondents consider community gardens to be an aesthetic asset to their neighborhood, agreeing that they provide community gathering space (see Table 3). Additionally, a majority of survey respondents agreed that residents who are not members of their garden also visit it (see Table 3). Moreover, being a part of a community garden led 59.57% of the community garden respondents to make more friends (see Table 3). Next, the primary theme of food security was expressed through improved access and availability to nutritious food. Most survey respondents use preservation techniques like drying and canning to maximize their harvest, and being a part of a community garden helped to reduce the amount of groceries bought during the growing season (see Table 4). Lastly, approximately half of community

garden respondents identified their main motivation for joining was to eat more fresh produce (see Table 5).

Table 1. Survey questions categorized by primary and secondary themes

Primary Theme	Secondary Themes	Survey Question
Health	<ul style="list-style-type: none"> • Active Lifestyle • Nutrition • Mental Health • Quality of Life • Environmental Sustainability 	<ul style="list-style-type: none"> • How far do you live from your community garden? • How do you get to your community garden? • Has being a part of a community garden led to changes in your diet or health?
Social Cohesion	<ul style="list-style-type: none"> • Sense of Community • Place Attachment • Community Engagement • Intergenerational Knowledge • Knowledge Sharing • Social Capital • Neighborhood Safety 	<ul style="list-style-type: none"> • What type of plot do you maintain? • How long have you been a member of the community garden? • How often do you visit your plot during the growing season? • Do you meet with other community garden members outside of the garden? • Has being a part of a community garden led you to make more friends? • Have other community garden members helped you outside of work at the community garden? • Would you ask another community garden member for non-garden related help? • Do you think community gardens are an aesthetic asset to your neighborhood; are they nice to look at? • Do residents who are not members visit the community garden? • Has growing your own food led you to get involved in other community groups, organizations or programs? • Has being a part of a community garden helped you to gain new skills?
Motivation		<ul style="list-style-type: none"> • What is your main motivation for joining the community garden? • Has being a part of a community garden changed your relationship to food?
Food Security	<ul style="list-style-type: none"> • Food Availability • Yield Abundance • Access to Nutritious Food 	<ul style="list-style-type: none"> • How often do you and your household eat the harvest from your plot during the growing season? • Do you use preservation techniques like

	drying and canning to maximize your harvest?
	<ul style="list-style-type: none"> • Who consumes the harvest from the plot you maintain? • Do you notice being part of a community garden helps you save money on groceries?

Table. 2. Survey questions and largest response percentage categorized under primary theme of health

Survey Question	Largest Response (%)
How far do you live from your community garden?	38.30 over a 20-minute walk, I usually drive
How do you get to your community garden?	51.06 I walk and/or bike
Has being a part of a community garden led to changes in your diet or health?	29.09 I eat more fruits and vegetables

Table 3. Survey questions and largest response percentage categorized under primary theme of social cohesion

Survey Question	Largest Response (%)
What type of plot do you maintain?	70.21 individual plot
How long have you been a member of the community garden?	53.19 1-3 years
How often do you visit your plot during the growing season?	46.81 1-2 times per week
Do you meet with other community garden members outside of the garden?	51.06 sometimes
Has being a part of a community garden led you to make more friends?	59.57 yes
Have other community garden members helped you outside of work at the community garden?	63.83 no
Would you ask another community garden member for non-garden related help?	42.55 no 42.55 maybe
Do you think community gardens are an aesthetic asset to your neighborhood; are they nice to look at?	65.22 yes, they provide community gathering space
Do residents who are not members visit the community garden?	86.96 yes
Has growing your own food led you to get involved in other community groups, organizations or programs?	53.19 no
Has being a part of a community garden helped you to gain new skills?	25 in starting seeds 25 other

Table 4. Survey questions and largest response percentage categorized under primary theme of food security

Survey Question	Largest Response (%)
How often do you and your household eat the harvest from your plot during the growing season?	42.55 produce from my garden is consumed every other day (3-5 times per week)
Do you use preservation techniques like drying and canning to maximize your harvest?	74.47 yes
Who consumes the harvest from the plot you maintain?	43.48 my family and my neighbors
Do you notice being part of a community garden helps you save money on groceries?	63.04 sort of, I don't buy as many groceries during the growing season

Table 5. Survey questions and largest response percentage for main motivation

Survey Question	Largest Response (%)
What is your main motivation for joining the community garden?	49.02 eat more fresh produce
Has being a part of a community garden changed your relationship to food?	35.38 yes, I am more conscious of where my food comes from

Analysis & Recommendations

Consistent with community garden literature, the results of this study revealed community gardens as foundational platforms in Peterborough for building social networks, and cultivating community. As Lanier et al. (2015) suggests, community gardens produce much more than food, holding true for Peterborough. Specifically, by bringing people together with the common purpose of growing food, community gardens generate place attachment, and a sense of community. For example, attachment to place can be enhanced through the beautification of community spaces, providing places to gather, and encouraging interaction (Lanier et al., 2015; Elgi et al., 2016; Veen et al., 2016). In Peterborough, most respondents agreed that community gardens look nice, and provide community gathering space (see Figure 1). When asked whether community gardens are an aesthetic asset to their neighborhood, survey responses that specified an alternate answer asserted that community gardens, “inspire passersby to consider a lifestyle as a producer of things rather than a passive consumer,” “are a point of focus and discussion in the neighborhood”, and they “raise awareness of food issues”. It is interesting to note these responses, since they reveal a socially aware and engaged population. Further, residents who are not community garden members visit the gardens, demonstrating that these spaces are shared not just by members, but by the entire neighborhood (see Figure 2). Since community gardens in Peterborough currently facilitate the creation of community cohesion, future garden development could integrate more opportunity for gathering space as a potential design element. Further, due to time constraints this study did not undertake interviews, which would have afforded greater insight into the lived experiences of community gardeners in Peterborough. It is suggested that future studies engage the community through interviews, since the survey revealed a passionate and knowledgeable gardening population.

Additionally, this study found that community gardens in Peterborough helped to enhance food security by reducing the amount of groceries purchased during the growing season, and extending harvest when preservation techniques were applied (see Figure 3 and 4). Notably, most respondents use preservation techniques to extend their harvest, implying that community gardeners in Peterborough are knowledgeable about the practice, or at the very least are interested enough to attempt it. Though this study explicitly addresses food security in relation to the access and availability of nutritious food, it neglects to address access and availability of culturally appropriate food. For instance, community gardening has been taken up by Syrian families in Peterborough, contributing to their happiness and quality of life (Hamadi, 2017). Though the study was random, there was inherent bias in its accessibility to minority populations. Specifically, the neighborhoods chosen for flyer distribution are generally accepted as wealthier areas of Peterborough. Further studies should make an effort to facilitate accessibility to groups that are potentially food insecure, for example, refugees and low-income neighborhoods. This would allow for a more comprehensive understanding of community garden impact on food security.

Health impacts of community gardens in Peterborough were interlinked with motivations for joining. Although motivations for joining were varied, half of respondents identified eating more fresh produce as their main motivation (see Figure 5). Interestingly, the largest response to changes in diet or health as a result of community garden involvement, reflected this desire, with the largest response eating more fruits and vegetables (see Table 2). Supporting nutrition benefits, this study also found that half of respondents walk and/or bike to their garden (see Table 2). Consequently, community gardening in Peterborough helps to foster more active lifestyles, especially since the largest respondent group lives over a 20-minute walk from their

community garden (see Table 2). As a result, future research directions could study active transportation corridors, determining whether community gardens are adequately accessible via pedestrian and bike lanes.

Conclusion

In response to the disempowering impacts of hegemonic agribusiness, community gardening has emerged, creating a sustainable food alternative that addresses social cohesion, food security, and health. The City of Peterborough is no exception. In terms of social cohesion, community gardeners in Peterborough are not the only ones who visit community gardens, revealing these spaces as important points of interaction within neighborhoods. Further, it was generally held that community gardens are a community asset, bringing people together and fostering place attachment. Food security improvements were associated with economic savings, enabling community garden members to require less groceries during the growing season. Peterborough community gardeners were primarily motivated by the desire to eat more fruits and vegetables, revealing health impacts as an important driver in membership. These nutrition drivers, combined with active transportation choices, suggest that community gardeners in Peterborough desire and experience health benefits as a result of membership.

Community participation was key to the overall success of this project. Though participation rate met the goal of approximately 50 participants (47 total), the data collection method was inherently biased towards a more affluent demographic of Peterborough residents. The data was skewed through the distribution of flyers to specific neighborhoods, providing a narrow understanding of Peterborough community gardeners as a whole. Additionally, the typical growing season for community gardeners spans from May-October. This limited the project, since gardeners had to rely on memory to recount their behaviors. In response to these

limitations, future research should enable greater accessibility thorough broader outreach initiatives, and a longer participation period. Further, survey implementation during the growing season may impact responses, since they would better reflect gardeners lived experiences.

In conclusion, “good food has the power to enhance our communities, build our economy, and transform our everyday lives” (Nourish, 2018). This research contributes to a greater understanding of how food is used as a vehicle to achieve social benefits surrounding social cohesion, food security, and health. Through this research, the unique social benefits experienced by Peterborough’s community gardeners were explored, revealing a health-conscious orientation, supported by evidence of social cohesion and enhanced food security. This information can be used to help direct Nourish programming and to aid in future grant proposals. Community gardening produces a plethora of positive social outcomes, empowering neighborhoods to become engaged in their local food networks. Through the continued practice of community gardening in Peterborough, much more than just food is cultivated.

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Appendix

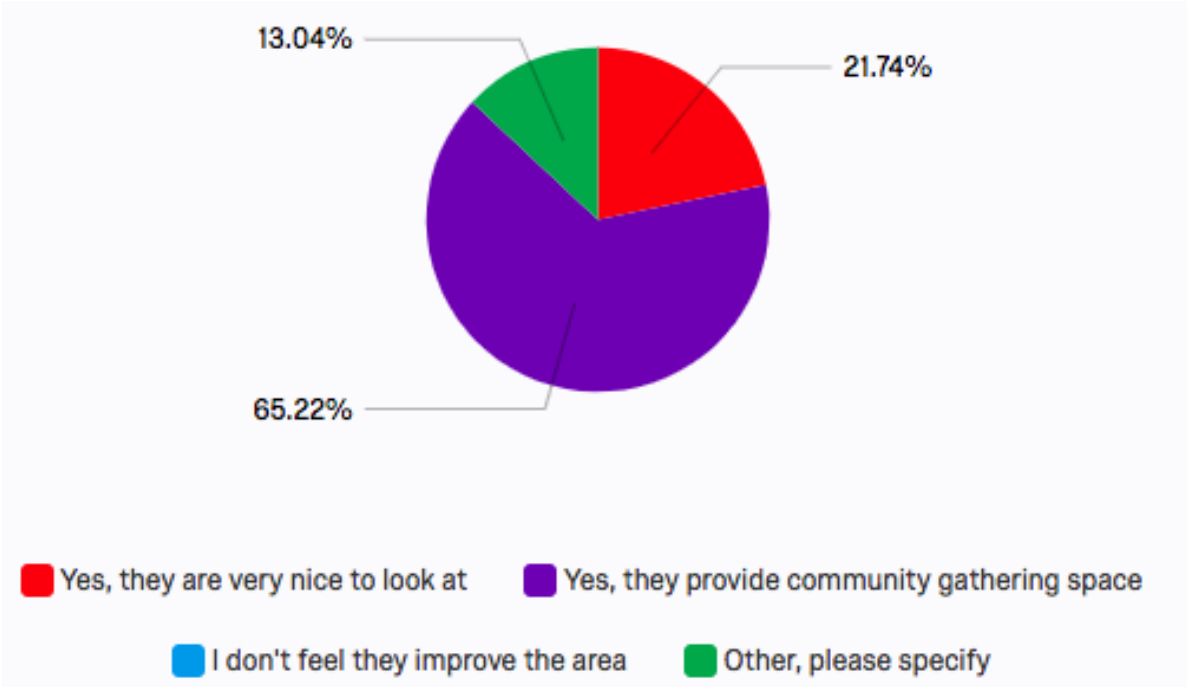


Figure 1. Do you think community gardens are an aesthetic asset to your neighborhood; are they nice to look at?

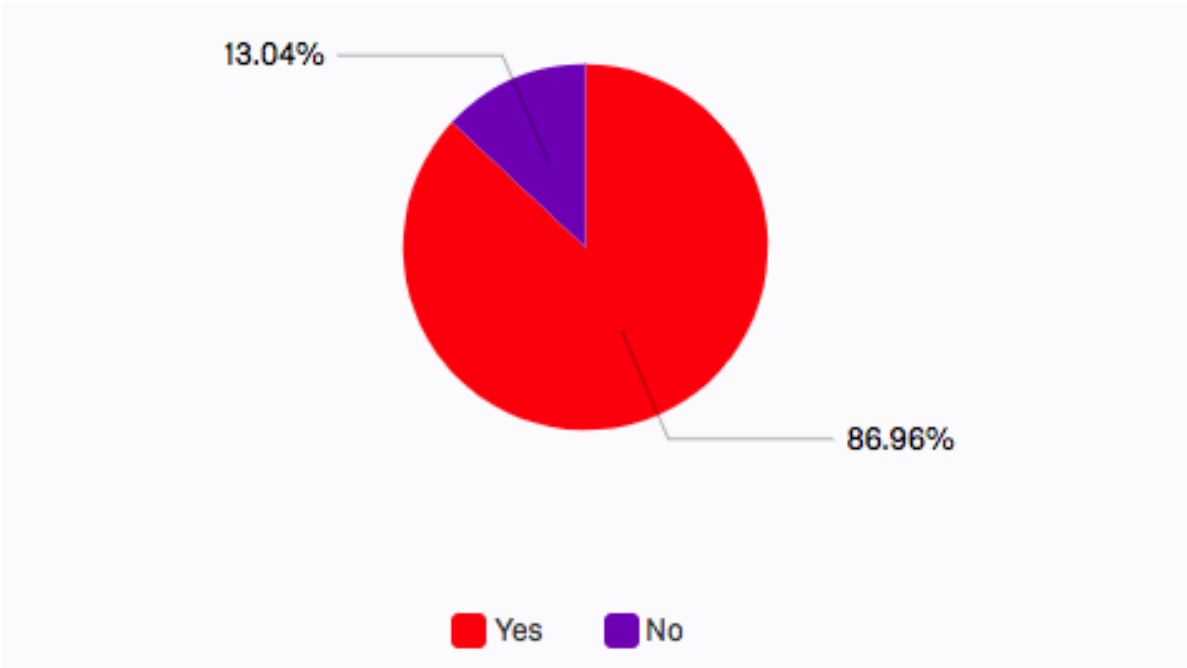


Figure 2. Do residents who are not members visit the community garden?



Figure 3. Do you notice being part of a community garden helps you save money on groceries?

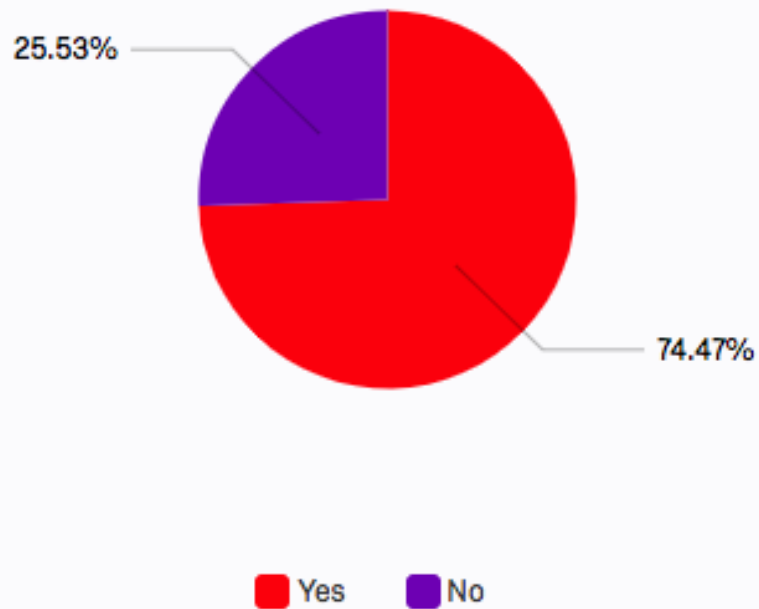


Figure 4. Do you use preservation techniques like drying and canning to maximize your harvest?

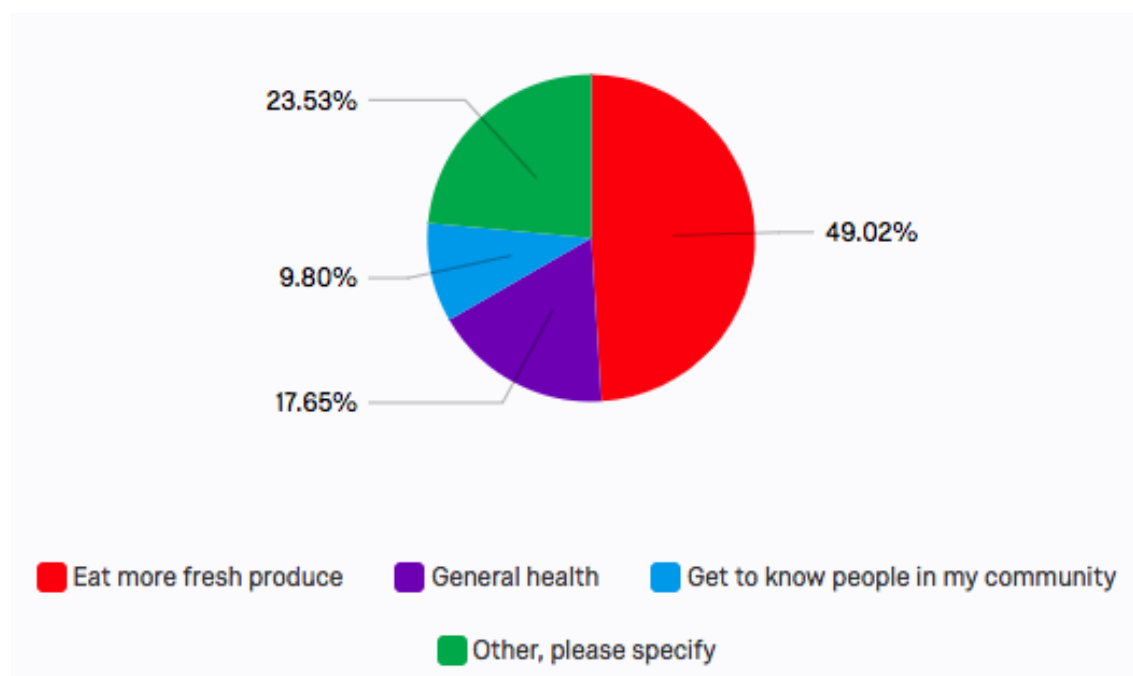


Figure 5. What is your main motivation for joining the community garden?