

# Cultivating Health through Community Gardens

~Cassandra Montoya~

Community gardens are like snowflakes—no two are identical. For this reason, it has been difficult for researchers to develop concrete, scientific measures for deciphering community gardens' influence on the health of their communities, and for comparing different gardens to one another. While this has the unfortunate downside of complicating requests for funding assistance (many governments are reluctant to fund programs that cannot promise concrete, quantifiable outcomes),<sup>1</sup> the diversity and flexibility of community garden structure shows great potential, in that individual gardens can be tailored to fit the specific needs of the specific community in which they will be situated, because, after all, no two communities are identical either.

This paper makes the argument that community gardens are a valid health policy option primarily because they serve so many functions, and can therefore impact so many facets of health at once (unlike many public health programs that tend to narrowly focus on one aspect of health at a time, often missing the big picture), and also because community gardens have very tangible results, and while these results may not currently be scientifically measureable, they are often noticed by members of the community nonetheless.<sup>2</sup> To demonstrate that community gardens should not be overlooked in health policy discussions, this paper first delves into the various areas of health that community gardens can influence, then looks into some current governmental efforts to improve health through community gardens, and finishes with a discussion of general considerations for the development of successful community gardens, as well as recommendations for governments looking to create policies that take these considerations into account.

## How Community Gardens Improve Health

One of the most direct ways community gardens can impact health is by improving nutrition of the gardeners and their families. For one thing, the gardens that choose to grow fruits and vegetables often make fresh and local produce much more available than it otherwise might be. Also, community gardens can function as places in which individuals are encouraged and given the opportunity to try new fruits and vegetables that they may never have had before. Some gardens choose to grow exotic produce, and some even host potlucks or cooking classes in which people can try new dishes and methods of preparing classic produce. These benefits can also reach beyond the gardeners themselves in some cases when the garden

hosts a farmers market or a community-wide open house.<sup>3</sup>

Apart from nutrition, community gardens can also increase the physical wellbeing of gardeners by increasing their weekly amount of exercise. Gardening is considered to be a moderate to high intensity activity, and has been associated with healthier cholesterol and blood pressure levels.<sup>2</sup>

However, community gardens do not simply promote physical wellbeing; they also promote mental wellbeing. Gardening provides a chance to relax and feel a connection to nature that may be otherwise lacking, especially in urban environments. Furthermore, many community gardens encourage interaction between community members, which can broaden an individual's social network, or strengthen

social ties within that network.<sup>4</sup> Such social connection has been shown to buffer against the negative effects of stress, as well as influence an individual's views of and participation in health behaviors.<sup>5</sup>

On an even broader level, community gardens often strengthen the neighborhoods in which they are situated. In fact, a review of community gardens in upstate New York found that 51% had noticeably improved local residents' attitudes of their communities, indicated by improved maintenance of other properties in the neighborhood, reduced littering, and increased neighborhood pride. Additionally, 33% of community gardens were perceived as catalysts for community organizing by providing a common space to meet, socialize, and learn about other groups and issues in the community. This community organization, in turn, lead to increases in such activities as neighborhood beautification and crime watch. Interestingly, the same study found that community gardens in low income communities were four times more likely to lead to organization, which the researchers theorized may be attributed to the fact that these communities have more issues around which to organize.<sup>2</sup>

A smaller study that focused on three community gardens in Minneapolis, MN mentions that one community garden examined wasn't particularly concerned with growing produce, but instead focused more on neighborhood beautification and community strengthening. This garden led the transformation of a community in which drug activities made residents feel unsafe to one in which parents felt able to let their children play freely outside and in the garden.<sup>4</sup> Such safe communities can have important health benefits for residents, by making it easier to exercise safely, and

decreasing activation of the body's stress response.<sup>6</sup>

### Current Policies Aiming to Promote Health through Community Gardens

Some interesting results have come from California Healthy Cities and Communities (CHCC)—a program aimed at improving nutrition and physical activity levels—which has funded community gardens in several California cities.<sup>1</sup>

West Hollywood, for example, created a school gardening program that was supplemented with nutrition and physical activity education. According to self-reports, participants' physical activity increased by 6% and daily fruit and vegetable intake increased by 10%. Meanwhile, San Bernardino created its own school gardening program, and increased the number of students gardening at home by 20%.<sup>1</sup>

Also, some cities created policies that successfully encouraged the creation of new community gardens. For example, Escondido encouraged city beautification through its "Adopt-A-Lot" program that simplified the use of temporarily vacant city land for gardens, and through a no-cost water policy for gardens on city lots.<sup>1</sup>

Unfortunately, due to lacking scientific research, the extent of the impact that these programs may have had on the health of individuals within these cities is unclear.<sup>1</sup> However, these policy examples are still mentioned here, because policies should not be considered ineffective simply because proper data collection methods have not yet been developed.

Additionally, it *is* clear that such policies did, in fact, play a role in the creation of new community gardens in several California cities, meaning some of the

policies that came about as a result of CHCC could be used elsewhere for this purpose.

### Considerations for Community Garden Structure & Policy Recommendations

As previously mentioned, community gardens can look drastically different, and have drastically different functions within a community. Therefore, when creating a new community garden or policies that aim to create community gardens, it is important to know how certain decisions will shape the potential health outcomes.

For example, when creating a community garden one must decide whether to divide the land into plots to be cultivated by individuals, or to follow a communal structure in which all gardeners work one large plot of land. In most cases, the communal version easily fosters community among gardeners, as they are all working toward a common goal. This also encourages conversations about what that goal might be—leading to the exploration of social norms and roles within the community.<sup>4</sup> Individual plot systems, on the other hand, are sometimes an easier way to draw in gardeners from the community because they can grow exactly what they want to grow for themselves<sup>3</sup>, but multiple plots can make it more difficult to foster a sense of community.<sup>4</sup> Establishing community is not impossible, however, and can be encouraged through organized meetings, common work days, shared resources, and even shaping the plots such that gardeners can easily see each other.<sup>3,4</sup>

Another decision is who to include. Some community gardens are primarily concerned with promoting a sense of neighborhood pride and connectedness, and these gardens often limit participants to people who live within a certain radius of

the garden. Others are primarily concerned with providing a place for individuals who may not have their own gardening space to connect with nature, grow food for themselves or simply experience the joy of expressing creativity through growing plants. These gardens are typically fine with opening the garden to people from a much larger area.<sup>4</sup>

Yet another consideration, especially for urban gardens,<sup>2</sup> is what to do about vandalism or theft (and how to balance this with inclusiveness of non-gardeners). Some gardens choose to build high fences with padlocks to prevent theft of produce.<sup>4</sup> Some become very actively involved with the immediate neighbors or the neighborhood watch.<sup>3,4</sup> Other gardens decide to simply plant more produce than is needed so if some is taken it's not a big loss. Others create very visible, yet permeable barriers, and post signs about the garden and what the produce is used for. Some plant portions that are specifically for non-gardeners, in the hopes that they will limit their picking to just those sections. And still others attempt to trick non-gardeners by planting produce that is difficult for the untrained eye to recognize when ripe (such as heirloom tomatoes, or unusual plants), putting more recognizably ripe produce (e.g. red tomatoes) in harder-to-spot-locations, and even sprinkling flour on the plants to give the appearance of the use of pesticides.<sup>3</sup>

All of this talk about different strategies for reaching different goals is essentially to illustrate that cookie-cutter community gardens should not be anyone's goal.

For this reason, when considering the creation of community garden-related policies, governments should aim first and foremost to support the community in whatever it decides its goals are. One of the

most important strategies a government can follow to do this is to involve the local community either from the beginning or as quickly as possible. Strong community support can ensure that the project continues even after the original planners leave, can help the garden be tailored to best fit that community's needs and expectations, and can even serve a practical function like decreasing vandalism and theft—either because more people in the area are watching out for the garden's security, or because anyone who would have had a reason to steal/vandalize is now a member of the garden.<sup>3</sup>

Another important way in which the government can promote health through community gardens is to encourage the local community members to start new gardens themselves. This could mean

increasing funding available for grants to help community gardens cover expenses, especially in their early years. However, as mentioned above, there have been many other effective policies through which governments have decreased the barriers to developing a new community garden (such as making vacant lots more available, and decreasing the cost of water for gardens on city land.<sup>1</sup> However it is also possible for governments to increase community gardening by empowering gardeners by making additional resources and knowledge more available to the interested public, either through brochures, websites, or community outreach programs. In fact, some of these resources have already been created by governments around the world, and would not take much modification to be applicable to new areas.<sup>3</sup>

In conclusion, researchers are still stumped by the question of how to scientifically show that community gardens improve health, and it *would* be helpful for researchers to develop more concrete and widely applicable research methods in this area. However, until that happens, there are many wonderful cases and examples of health-promoting community gardens currently in existence, demonstrating that governments should not ignore community gardens as an effective method of encouraging community beautification, social mobilization, and improved health of the citizens living in the surrounding areas.

## References and Further Reading

1. Twiss, J., J. Dickinson, S. Duma, T. Kleinman, H. Paulsen, and L. Rilveria. "Community Gardens: Lessons Learned From California Healthy Cities and Communities." *American Journal of Public Health* 93.9 (2003): 1435-438. American Public Health Association. Web. 8 Mar. 2013. <<http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.9.1435>>. This resource details the ability of California Healthy Cities and Communities to inspire the creation of community gardens (despite the fact that this was not the primary goal). The article provides demographic data about the cities in which the community gardens are located, details of the policies that the cities developed to allow the gardens to receive assistance, and in some cases provides statistics of health outcomes resulting from these policies.
2. Armstrong, Donna. "A Survey of Community Gardens in Upstate New York: Implications for Health Promotion and Community Development." *Health & Place* 6 (2000): 319-27. *Community Gardens*. NC State University. Web. 8 Mar. 2013. <<http://nccommunitygarden.ncsu.edu/researchArmstrongSurveyNYHealthCommunityDevelopment.pdf>>. This study compares 20 community garden programs (representing 63 community gardens) in upstate New York based on phone interviews conducted with the community garden program coordinators. Overall, this study compares the gardens to each other (urban vs. rural, SES, communal vs., individual plots, etc.) and analyzes the various gardens' abilities to foster a sense of community.
3. Claire Nettle (2009) *Growing Community: Starting and Nurturing Community Gardens*. Adelaide: Health SA Government of South Australia and Community and Neighborhood Houses and Centres Association Inc. <[http://books.google.com/books?hl=en&lr=&id=4o69Qp3y1f0C&oi=fnd&pg=PR7&dq=community+garden+fix&ots=59d9\\_1qwOA&sig=l6cTXis40EHQFVyg770x7yyKqo0#v=onepage&q&f=false](http://books.google.com/books?hl=en&lr=&id=4o69Qp3y1f0C&oi=fnd&pg=PR7&dq=community+garden+fix&ots=59d9_1qwOA&sig=l6cTXis40EHQFVyg770x7yyKqo0#v=onepage&q&f=false)>. This is a thorough "how-to" guide developed by the South Australian government detailing different (and often creative) methods of structuring a community garden and dealing with common problems such as theft, vandalism, land tenure, sustainability, etc. It also details many benefits of community gardens, and provides lists of sources so that readers can use this evidence to appeal to their local governments, potential donors, and other members of the community for funding, land, or support.
4. Kurtz, Hilda. "Differentiating Multiple Meanings of Garden and Community." *Urban Geography* 22.7 (2001): 656-70. *Metapress*. Web. 8 Mar. 2013. <<http://bellwether.metapress.com/content/q0422037l7506111/fulltext.pdf>>. This article looks at 3 community gardens in Minneapolis, MN and analyzes how their histories and reasons for creation led to their current structures, and how the current structures contribute to feelings of inclusiveness or exclusivity, and how this affects the surrounding community.
5. Umberson, Debra, and Jennifer Karas Montez. "Social Relationships and Health: A Flashpoint for Health Policy." *Journal of Health and Social Behavior* 51 (2010): S54-66. *Sage Journals*. Sage Publications, 8 Oct. 2010. Web. 15 Mar. 2013. <[http://hsb.sagepub.com/content/51/1\\_suppl/S54](http://hsb.sagepub.com/content/51/1_suppl/S54)>. This article examines how social relationships influence health, and was briefly brought up in this paper to show that if community gardens are successful in fostering a sense of community, this becomes an avenue through which they can improve health.
6. Braveman, P., S. Egerter, J. An, and D. William. *Neighborhoods and Health*. Issue brief no. 8. Robert Wood Johnson Foundation, 1 May 2011. Web. 15 Mar. 2013. <[http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2011/rwjf70450](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70450)>. This source analyzes the impact of neighborhoods on the health of the individuals living within them, and was used in this paper to show that if community gardens are successful in making neighborhoods safer, then this is one pathway through which the garden can improve the health of the immediately surrounding community.