A Growing Health Tool Kit
A community food grower’s guide to working with the health service
Sustain
Sustain, the alliance for better food and farming advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, enrich society and culture and promote equity. Sustain represents around 100 national public interest organisations working at international, national, regional and local level.

Garden Organic
Garden Organic is a charity which brings together thousands of people who share the common belief that organic growing is essential for a healthy and sustainable world. Through campaigning, advice, community work and research Garden Organic aims to get everyone growing ‘the organic way’.

Growing Health is funded by the Tudor Trust
Contents

Growing Health ........................................................................................................... 4
Why grow food for health? ......................................................................................... 4
Guide to using the toolkit .......................................................................................... 5
Summary of Contents ................................................................................................. 5
Understanding health commissioning ........................................................................ 6
The health service: getting to grips with the structure ................................................ 6
Understanding the difference between Public Health and CCG’s .................................. 6
What is commissioning in the context of health services? ............................................ 6
Commissioning Structure ............................................................................................ 7
Glossary of terms ......................................................................................................... 8
Other useful links ......................................................................................................... 8
How to get commissioned ......................................................................................... 9
Developing your product or service .......................................................................... 9
Understanding your local context .............................................................................. 9
Developing a consortia or partnership ....................................................................... 9
Working with the health service ............................................................................... 10
Presenting the evidence - the health and wellbeing benefits of food growing .......... 11
Evidence report: The benefits of gardening and food growing for health and wellbeing ... 11
An overview of the evidence ..................................................................................... 12
Factsheets .................................................................................................................. 12
Product sheets ............................................................................................................ 12
Other useful materials .............................................................................................. 13
Growing Health posters ............................................................................................. 14
Case Studies ............................................................................................................... 15
Showing impact through measurement and evaluation ............................................. 18
Which tool to use? ................................................................................................. 18
Appendices ............................................................................................................... 19
Factsheets .................................................................................................................. 19
Product sheets ............................................................................................................ 28
Materials ..................................................................................................................... 33
The Case Studies ....................................................................................................... 36
Growing Health

Growing Health is a national project run by Garden Organic and Sustain to see how community food growing can be routinely used by the health and social care services as a way of promoting health and wellbeing.

Why grow food for health?

The health, wellbeing and social benefits of gardening, horticulture therapy and food growing are becoming better established and documented. Across the UK there are many growing initiatives used by different groups to provide opportunities for exercise, to address physical and mental health issues, encourage social interaction and develop skills, while also providing access to fresh, local fruit and vegetables. The people involved include those with mental health problems and physical impairments, people with long term conditions, learning difficulties or in recovery and rehabilitation.

Increasingly health and social service providers are getting involved in such food growing projects, as they start to recognise their potential to benefit people’s health and well-being.

Growing Health encompasses all forms of community food growing in both urban and rural settings including the following types of projects:

- therapeutic and social horticulture
- community gardens
- community supported agriculture and care farms
- rehabilitation, residential and care homes
- shared garden projects
- any project where more than one person grows food and benefits socially, physically or mentally or any combination of these outcomes.

Growing Health has identified examples and good practice to help food growing projects to work with the health service. This tool kit provides useful information to help any community group to provide this as a service and become commissioned.
Guide to using the toolkit

This toolkit brings together all the useful guides, information and evidence that Growing Health has collected. It is easy to access so that you can understand the commissioning process, see how your project could be working with health service and get ideas on how best to present your food growing project.

Summary of Contents

- **Understanding Health Commissioning**
  Provides an overview and links to useful guides on how commissioning works, to provide your project with background information to help you get commissioned.

- **Presenting the Evidence**
  This section provides a summary of the evidence and factsheets showing how food growing can improve health and wellbeing for certain population groups. It also includes products sheets, a leaflet to use with commissioners plus posters which further summarise the information.

- **Case Studies**
  Examples of current projects which use food growing in the community to provide a health benefit and have been commissioned to provide this service.

- **Showing Impact through Measurement and Evaluation**
  An overview of why evaluation is important and tools that you could use.

- **Appendices**
Understanding health commissioning

The health service: getting to grips with the structure

Growing Health has been working with food growing projects to help them understand the health service structure which came about after the Health and Social Care Act 2012.

The main changes included:
- The set-up of Clinical Commissioning Groups (CCGs) which replaced the Primary Care Trusts.
- The move of Public Health services to the local authority supported by Public Health England.
- The setting up of Health and Wellbeing Boards to tackle local inequalities in health.

Understanding the difference between Public Health and CCG’s

- Public Health looks at population wide health issues and population level interventions ‘to improve the health of the poorest, fastest’. They focus on improving health and wellbeing and reducing health inequalities working under the new public health outcomes framework.
- Clinical Commissioning Groups focus on treating illnesses and are looking to direct services into key priority areas or population groups within the area. Each GP practice is part of a CCG and there are 211 CCGs in total, which vary in size and coverage, but they commission the majority of health services. This includes emergency care, hospital care, maternity services, community and mental health services.

For more information visit the Kings Fund website bit.ly/28LORz5

What is commissioning in the context of health services?

‘Commissioning – the process of assessing the needs of a local population and putting in place services to meet those needs.’ (Department of Health, 2010, Equity and excellence: liberating the NHS, London: DH. Available for download at www.dh.gov.uk)

Commissioning is a cycle of ‘Analyse, Plan, Do and Review’. It starts with strategic planning, by deciding what services are needed and their priority, then looks at what resources are needed to provide these services plus why, how and where, and then evaluating and monitoring the outcomes.
Commissioning Structure

Based on the IPC model ipc.brookes.ac.uk/

**Analyse**: The analysis of need, of capacity, assets and resources and of the capability of the market involves agreeing priority needs with partners defining the outcomes to meet those needs.

**Plan**: Gap analysis, stakeholder engagement, the design of services and service pathways and developing a joint commissioning strategy.

**Do**: Implementing the commissioning plan, facilitating the market, building capacity, sourcing the providers capable of meeting a specification and contracting for the new services. Ultimately delivering to users.

**Review**: Contract monitoring and reviewing the effectiveness of the strategy. Reviewing and learning from delivery and feedback from users.
Glossary of terms

You will find a useful guide to the key terms used in relation to commissioning at: bit.ly/28KqDlh

Other useful links

Commissioning structures and guides

- A beginners guide to commissioning – navca
  www.navca.org.uk/resources/76-beginners-guide-to-commissioning
- Influencing local commissioning for health and care, guidance for the voluntary and community sector – regional voices
- Influencing the New Health System in a Local Area - A Briefing for Local Voluntary and Community Groups – regional voices

Contacts

- Clinical Commissioning Groups - www.england.nhs.uk/ccg-details/

Photo: Ashley Bird
How to get commissioned

Developing your product or service

One of the first things to do is think about the service or product you offer, including:
- Who benefits from your activity?
- What does it cost?

In order to be able to commission a service, the commissioner needs to understand how this fits with their priorities.

Understanding your local context

You may not have much time to spend reading lots of documents but if you only do two things:
- **Identify your local contacts**: Can you find contacts in the Clinical Commissioning Group, Health and Well Being Board and Public Health contacts.
- **Find out your local health priorities**: Do a web search using the name of your local CCG and search for JSNA (Joint Strategic Needs Assessment). The JSNA analyses the local needs and priorities to inform and guide the commissioning process. It underpins the local health and wellbeing strategies.

Developing a consortia or partnership

One of the key things to think about is what you are offering the commissioners in terms of your service. Commissioners may not have the time or inclination to deal with lots of small groups so think about what partnerships or collaborations could offer, including:
- Other similar but different services that appeal to wider groups.
- Activities that cover the winter season e.g. cooking.
- Organisations that offer similar activities but in a different geographical location.
- Larger organisations who can take on the challenge of dealing with CCG.
- Smaller organisations who can offer a real grassroots services.

It is also important to think about the type of arrangement that you want to have with these organisations, ranging from an informal situation where you all get together to promote yourself to a more formal partnership or consortium, governed by a document that sets out the status/ lead/ roles etc.
Whatever you decide it needs to be appropriate to your situation, but we would advise putting something in writing between partners, no matter how informal to avoid confusion. Contact your local council for voluntary services for more information or take a look at the links below:

- www.communitymatters.org.uk/content/563/What-is-a-consortium-and-how-does-it-differ-from-a-partnership
- consortiasupport.org.uk/

**Working with the health service**

A lot of information has been written about the benefits of a partnership between the health services and voluntary sector. To find out more visit www.socialenterprise.org.uk/advice-services/publications/the-power-partnerships-working-with-the-vcse-sector-for-health
Presenting the evidence - the health and wellbeing benefits of food growing

The health, wellbeing and social benefits of gardening, horticulture therapy and food growing are becoming better established and documented and there are many examples across the UK, of growing initiatives that are used by different groups to provide opportunities for exercise, to address physical and mental problems, to encourage social interaction and to develop skills, while also providing access to fresh, local fruit and vegetables.

Growing Health has been pulling together different types of evidence that can be used either as a starting point to open discussion with health contacts or to back up your service.

This includes

- Evidence report - a detailed report providing a review of the scientific literature
- Overview of the evidence – summary table of the evidence
- Product sheets – demonstrating how you can present your product (or service) to commissioners
- Growing Health posters – used at conference to summarise the findings in one poster
- Factsheets – that summarises the evidence and benefits for key areas
- Other materials – including a leaflet and PowerPoint presentation that can be used by groups with commissioners
- Case studies - these can be found in the next section and give examples of projects that have been commissioned or developed strong links with health services.

Evidence report: The benefits of gardening and food growing for health and wellbeing

This report reviews the extensive scientific literature showing the benefits of gardening and community food growing for both physical and mental health. It presents a compelling case for action by health professionals and the NHS; local authority planners and Government planning policy specialists to create, protect and promote gardening and community food growing. It can be downloaded from www.sustainweb.org/publications/the_benefits_of_gardening_and_food_growing/
An overview of the evidence
This is a table summarising the published evidence on the benefits of gardening and food growing in relation to specific health and wellbeing issues which can be downloaded from www.sustainweb.org/resources/files/reports/GH_Benefits_food_growing_for_health.pdf

Factsheets
This series of short briefings presents the benefits for particular health areas covering.

- Gardening and food growing to reduce stress and stress related illness (Appendix 1)
- Gardening and food growing for healthy weight (Appendix 2)
- Gardening and growing for people with dementia (Appendix 3)

Product sheets
These are examples of services that can be offered and provide an overview of the product, identify the client group, outcomes and the evidence. Use these examples and adapt them to your local needs.

Social and Therapeutic Horticulture
(Appendix 4)

Growing Enterprise
(Appendix 5)

A consortium approach: The Natural Health Service
The Natural Health Service in Halton, Merseyside, has lead on this approach and provides a single contact point for a series of well-developed services delivered in the natural environment, proven to tackle a range of health and wellbeing issues. The services offered take advantage of the area's wealth of green spaces and natural places. It developed a series of product sheets to provide an overview of the
products offered covering; an overview of the product; the target client group and outcomes from delivery, the evidence base and links to case studies. They are updatable and adaptable to local circumstances and developing evidence.

Product Sheets are provided for:

1. Horticultural Therapy
2. Walking for Health
3. Cycling for Health
4. Forest School
5. Green Gym.

Download from www.sustainweb.org/resources/files/other_docs/gh_naturalhealthservice_productsheets.pdf

**A partnership approach: Brighton and Hove Food Partnership**

The Brighton and Hove Food Partnership have developed two useful visual guides:

**Gardeners Referrers Guide** – summarises who the services is for, how they will benefit and referral guidelines.

**Gardening for Health and Wellbeing** – This is a case study and local benefits

**Other useful materials**

A leaflet and PowerPoint presentation to send or present to CCGs or public health, outlining the benefits and including posters presented at health conferences that summarise the benefits and evidence (Appendix 6).
Growing Health posters

To date three posters have been presented at health conferences and are available to download

Public Health England Conference 15-16 September 2015, Growing Health: Using community food growing to deliver public health outcomes

Royal College of GPs Conference 1-3 October 2015, Growing Health – making gardening and food growing a natural choice for your patients

Kings Fund Bringing together housing and public health; enabling better health and wellbeing 21 October 2015, Gardens for Life – using community based food growing in Tower Hamlets to deliver public health outcomes
Case Studies

Growing Health has written a series of case studies to show how food growing is delivering health and wellbeing outcomes in different areas across England, including examples of projects being commissioned by public health or the clinical commissioning. There are two full case studies in this toolkit and others can be found on the Growing Health website.

Bradford Community Environment Project (BCEP) (Appendix 8)
Gardening for Health (G4H) aims to reduce local inequalities in health and wellbeing by encouraging food growing and healthy eating.

Sydenham Garden (Appendix 7)
This project based in South East London, targets people suffering from mental health issues and dementia and is commissioned directly by the Clinical Commissioning Group.

Grow2Grow – They provide supported placements for vulnerable and disadvantaged young people who are in transition, excluded or recovering from mental health problems, and young people in and leaving care.

Harvest - The Brighton & Hove Food Partnership is a not-for-profit organisation that works on all aspects of food. They run a range of community-based projects that cover cooking, healthy eating, weight management, food growing and reducing food waste, whilst also taking a citywide strategic and lobbying role.
Growing Support Bristol - Growing Support works with older people and people with dementia, mostly living in residential care.

Lincolnshire Master Gardener programme - The Lincolnshire Master Gardener Programme run by Garden Organic, supports local people and communities to grow their own food at home, on their allotment or on other communal land with priority given to people living in the most deprived areas.

Plant a Seed – Grow Well - This project run by Hammersmith Community Garden Association supports health professionals working in residential and other community care settings across North West London. It provides them with the knowledge and confidence to develop therapeutic gardening projects within their own setting.

Women’s Environmental Network - This pilot project ran for 15 months (April 2014 - July 2015) employing the equivalent of two full time Community Gardening Co-ordinators.
Let’s Grow Lets Eat - Food4families is a community based food-growing project for local residents sponsored by Reading International Solidarity Centre (RISC). It aims to enable people to grow and cook food, while encouraging healthier eating and lifestyle habits.

For the full list of downloadable case studies visit www.sustainweb.org/growinghealth/case_studies
Showing impact through measurement and evaluation

From the outset of any project it is a good idea to set aims and outcomes for the group and individuals involved. These can then be measured and evaluated to ensure the gardening activities is making a difference, which will also influence commissioners and other funders to support your activities.

Starting with a baseline assessment of the aims and needs of the group and/or individuals involved, or that assesses their current health is a useful start for ongoing monitoring and evaluation.

Which tool to use?

There are many different tools available to help evaluate your project. It is always worth asking existing or potential funders if there is a particular tool or approach that they would recommend. Whilst you can, of course, devise your questionnaire or tools to evaluate your project but it is worth considering the tools already available.

If you do set up your own measuring system, ensure that goals are set following the SMART principle i.e. Specific, Measurable, Attainable, Realistic and Timely.

To help decide if an existing tool is right for you, Growing Health has worked with Communities Living Sustainably (CLS) Partnership to create a guide entitled ‘Which tool to use?’ covering the detail of each tool and how to choose. This can be downloaded in full from the website.

www.sustainweb.org/publications/whichtooltouse
Appendices

Factsheets

www.sustainweb.org/resources/files/reports/GH_Stress_Factsheet.pdf
www.sustainweb.org/resources/files/reports/HealthyWeight_Factsheet.pdf
www.sustainweb.org/resources/files/reports/Dementia_Factsheet.pdf
Gardening and food growing to reduce stress and stress related illness

Evidence show that the garden and the activity of gardening and other nature based activities can be effective in reducing stress and stress related illness:

Effects of being in a garden or nature space: Kaplan, 2001, Grahn and Stigsdotter, 2011; van den Berg and Clusters (2011) and Hawkins et al., 2011 and 2013.

Impact of the activity of gardening and food growing: Eriksson et al., 2011 and Sahlin et al., 2014

Background

Nearly one in three people are regularly stressed, reveals a survey for Mental Health Awareness week 2015; the survey of 2000 adults showed that significant numbers of people are often feeling stressed (29%), anxious (24%) and depressed (17%) (Mental Health Foundation, 2015). Stress, the feeling of being under too much mental or emotional pressure and inability to cope, can affect the way we feel, think, behave and how the body works. Stress is not an illness per se, rather natural reactions and reflexes triggered by a perceived threat. This is expressed physically through signs of anxiety, muscle tension, sweating, increased blood pressure, sleeping problems, loss of appetite and difficulty concentrating. Long-term stress without the possibility of recovery can cause and aggravate many illnesses, including cardiovascular diseases, gastrointestinal diseases, depression, reduced immune function, increased risk of infection, chronic fatigue and exhaustion disorder.

The impact of gardens, nature spaces, and the activity of gardening on stress

Research has shown that gardens and green nature spaces can reduce stress in several ways:

The view of a green space or the natural scene. Numerous studies have shown that simply viewing a green space through a window can relax people and reduce stress levels and this is expressed by, for instance, decreased recovery times from illness and fewer stress related incidents. Studies of these effects are provided by various authors including Ulrich (1984) and Kaplan (2001) and are reviewed by Maller et al. (2005).

Immersion in a natural scene. Studies have shown that when people immerse themselves in a natural setting this can reduce stress, increase relaxation and improve recovery (Cooper Marcus and Barnes, 1999, Ulrich, 1999). Being in a garden or a natural space can stimulate a range of senses, including but not only vision, and allow feel connected to nature; the role of 'connectedness to nature’ as Mayer et al. (2008) phrased it.

Engagement in gardening activity. One of the most effective ways to alleviate stress is to combine the effects of being in a nature setting with the effects of the physical activity of gardening. The annual growing cycle in the garden provide opportunities all-year-round for activities that connects us with natural lifecycles as well as providing physical exercise. Research has shown that for people recovering from stress, nurturing plants from seed to maturity evoked feelings of curiosity and desire to follow their progress (Eriksson et al., 2011). Gardening and other creative activities during rehabilitation facilitated feelings of competence and enjoyment and created positive hope for the future (Eriksson et al., 2011). Furthermore, physical exercise in a nature setting appears to have a greater effect than exercise in an ‘unnatural’ setting (Pretty et al., 2007).

Effects of being in a garden or a nature space

Research in Sweden found that people with access to a garden had significantly fewer stress occasions per year (Stigsdotter and Grahn, 2004, Stigsdotter, 2005). They reported that people living in flats without a balcony had the most stress occasions per year, with the number of stress occasions per year descending in order for those living in flats with a balcony, in houses with a small garden and those living in houses with a large leafy garden. In comparing gardens with other urban green spaces they found that while both were important for health, but having a private garden was more important (Stigsdotter, 2005). Grahn and
Stigsdotter (2011) have also studied the relationship between perceived sensory dimensions of urban green space and stress restoration. Their research identified and described eight sensory dimensions in green urban spaces. Whilst people in general preferred the dimension ‘serene’, followed by ‘space’, ‘nature’, ‘species rich’, ‘refuge’, ‘culture’, and ‘social’, ranked in order, they found that the dimensions ‘refuge’ and ‘nature’ were most strongly correlated with highly stressed individuals’ preferences. They concluded that a combination of ‘refuge’, ‘nature’ and ‘species rich’, and a low presence of ‘social’, was the most preferred urban green space, and can be interpreted as the most restorative environment for stressed individuals (Grahn and Stigsdotter, 2011).

Impact of the activity of gardening and food growing
Van den Berg and Clusters (2011) tested stress-relieving effects of gardening in a field experiment with 30 allotment gardeners in Amsterdam either gardening or indoor reading on their allotment plot for 0.5 hours. Both, gardening and reading led to decreases in cortisol levels during the recovery period, but decreases were significantly stronger in the gardening group. Positive mood was fully restored after gardening, but further deteriorated during reading. The authors highlighted that these findings provide experimental evidence that gardening can promote relief from acute stress (van den Berg and Clusters, 2011).

In the UK, Hawkins et al. (2011 and 2013) studied the effects of allotment gardening and they found a similar significant difference in perceived stress levels between the activity groups of ‘indoor exercise’, ‘walkers’, ‘allotment gardeners’, and ‘home gardeners’. Allotment gardeners reported significantly less perceived stress than participants of indoor exercise. There second study (Hawkins et al. 2013) had an older adult sample of community allotment gardeners with a particular focus on stress recovery. Here, too, results indicated that allotment gardeners appreciate both ‘doing’ the gardening as well as ‘being’ in the garden/allotment landscape with a wide range of benefits to their health and wellbeing.

In Sweden, nature-based stress management courses have been offered as an intervention for individuals at risk of adverse health effects from work-related stress. Sahlin et al. (2014) evaluated the effects of a 12-week nature-based course on stress related symptoms, work ability and sick leave. Results showed that the levels of stress, measured through self-rated burnout, sleep quality and somatic symptoms, declined between the start of the course and the end, and continued to decline to the last follow-up which was at 12 months after the end of the course. Along with the improvement in health, participants self-rated work ability increased and a decline in long-term sick leave was observed. The garden and nature content of the course, which included gardening activities following the season and guided walks in the nearby nature reserve, were found to have a profound role for stress relief and for tools and strategies to be developed and adopted to better handle stress (Sahlin et al. 2014).

Case study
The Garden of Health in Torup is a part of the internal services in Malmo municipality. Employees of the municipality, who are in the risk-zone of stress related disorders can be offered a 6 or 12 week nature-based stress management course. The approach is based on the recognition of the four corner-stones of health; relaxation and recovery, physical activity, food and relationships and the value of achieving a balance between these for healthier life. The courses include organic gardening and food growing activities combined with other nature based and mindfulness activities.

http://bit.ly/1MsOcPA

The Garden of Health in Torup, Malmo, Sweden
References


Gardening and food growing help to achieve and maintain healthy weights by influencing:

- **Fruit and vegetable consumption**: Nelson et al., 2007; Alaimo et al. 2008; Nelson et al. 2011
- **Physical activity**: Hawking et al., 2013; Park et al.; 2008
- **Body mass index**: Zick et al. 2013

**Background**

The Government’s obesity strategy ‘Healthy Lives, Healthy People; a call to action on obesity in England’ has identified that “overweight and obesity represent probably the most widespread threat to health and wellbeing” (Department of Health, 2011). 61% of adults are overweight or obese, and 23% of 4-5 year olds and 33% of 10-11 year old. The level of obesity in England, along with the rest of the UK, ranks as one of the most obese nations in Europe. It is the consequence of overweight and obesity that makes these statistics so serious, as excess weight is a major risk factor for diseases such as type 2 diabetes, cancer and heart disease. Alongside the serious ill-health it provokes, overweight can reduce peoples’ prospects in life affecting self-esteem and mental health (Department of Health, 2011).

Excess weight gain is the result of eating more calories than needed and/or undertaking insufficient levels of physical activity to match the calorie intake. Although this energy imbalance is driven by complex environmental, physiological and behavioural factors, changes in diet to reduce energy intake along with increasing physical activity are key to achieving and maintaining a healthy body weight. The National Institute for Health and Clinical Excellence (NICE) clinical guideline on obesity includes advice for people to eat at least five portions of fruit and vegetables each day in place of foods higher in fat and calories, and to make enjoyable physical activities part of everyday life. Engagement in gardening and food growing can address both of these recommendations and gardening is indeed recognised as moderate-intensity physical activity that adults are advised to undertake 30 minutes or more of on five or more days of the week (NICE, 2006).

**Evidence of impact of gardening and food growing on:**

i) **Fruit and vegetables consumption**

Reviews of academic studies from the UK and abroad, concluded that food growing programmes in schools can have positive impacts on pupil nutrition and attitudes towards healthy eating, specifically related to willingness to try new foods and taste preferences (Nelson et al., 2011; Draper and Freedman, 2010). For example, a study carried out in the USA 11-12 year old students involved in food growing over a four month period found that students were more willing to taste, and ate, a greater variety of vegetables than those in the control group (Ratcliffe et al., 2011). Lineberger and Zajicek (2000), also in the USA, reported more positive attitudes towards vegetables and increased snack preference for fruit and vegetables amongst 8-11 year old students involved in hands-on school gardening programmes. Evaluation of Food for Life Partnership (FFLP) in the UK showed significant associations between healthy eating and FFLP related behaviours (including participation in cooking and growing at school or at home); following their participation in FFLP the proportion of primary school-age children eating five or more portions of fruit and vegetables increased by 28% (Orme et al., 2011). Nelson et al. (2011) reported details of a number of studies demonstrating that pupils engagement in food growing activities resulted in increased consumption of vegetables, but also noted that most of the studies only considered whether pupils consumption habits had changed as an immediate effect of their involvement in growing and highlighted the lack of longitudinal evidence research confirming whether such programmes can change eating habits longer term.

For adults, Alaimo et al. (2008), reported that household members who participated in community gardening consumed fruits and vegetables 1.4 more times per day than those that did not and that they were 3.5 times more likely to consume the recommended 5 portions a day of fruits and vegetables. In the UK, the low-income diet and nutrition survey (Nelson et al., 2007) showed that men and women living in households that grew food consumed more fruit and vegetables that other men and women.
ii) Physical activity

Gardening is a physical activity and the range of garden tasks that use the upper and lower body such as digging, turning compost, raking offer moderate intensity physical activity whilst other tasks that use primarily the upper body in standing or squatting postures such as hand weeding, mixing soil sowing and transplanting seedlings offering low intensity physical activity (Park et al., 2008). Calorie calculators from various sources provide estimates of calorie expenditure for different gardening activities, indicating that garden work burns around 250 – 500 calories per hour, depending on the level intensity of the activity (Boots diet, 2013; Calories per hour, 2013).

The Growing a Healthier Older Population in Wales (GHOP) project (Hawking et al., 2013) measured the impact of being a gardener on aspects of physical and psychological health and wellbeing, comparing gardeners on an allotment plot or at a community garden with people same age group who were on an allotment waiting list. In this study, 68% of gardener participants reported exercise frequencies that met physical activity recommendations, compared to only 25 % of adults in the same age group in the Welsh population in general. Similarly, Park et al. (2008) concluded that older gardeners in their study met their physical activity recommendation through gardening.

In the review of studies relating to the impact of food growing programmes in schools, Nelson et al. (2011) noted that numerous studies mentioned that the perceptions of those involved was that the food growing contributed to making young people more physically active, but only a few studies reported actual results of physical activity levels. In one study Herman et al. (2006) showed that children involved in afterschool gardening programmes self-reported a significant increase in physical activity levels. Harris et al. (2009) report on a meta-analysis showing that encouraging physical activity in schools was only partially successful in improving children’s health and unlikely to reduce obesity in itself and concluded that gardening needs to be part of a more concerted programme of physical activity to encourage children to be more active. The physical tasks of food growing, such as digging and weeding, contributed to a broader understanding of the range of way of staying active and teachers report that children and young people take greater responsibility for their own health (RHS, 2010).

iii) Body mass index

Earlier this year, Zick et al. (2013) published results from their study evaluating the potential weight control benefits of community gardening. Using unique administrative data from Salt Lake City Utah, they examined body mass index (BMI) data from community gardening participants in relationship to BMI data for three comparison groups (neighbours, siblings, and spouses). In the comparisons, the data was adjusted for gender, age, and the year of the BMI measurement. Results showed that both women and men community gardeners had significantly lower BMIs than their neighbours who were not in the community gardening programme. Similarly significantly lower BMIs were observed for women and men community gardeners compared with their sisters or brothers. The third comparison with their spouses showed no statistically significant differences and the authors hypothesise that spouses would likely enjoy the dietary advantages of the community garden and might also help with the physical demands of gardening. In summary, Zick et al. (2013) concluded that “health benefits of community gardening may go beyond enhancing the gardeners’ intake of fruit and veg. Community gardens may be a valuable element of land use diversity that merits consideration by public health officials who want to identify neighbourhood features that promote health”.

Case study: Warwickshire Master Gardeners

Evaluation of the Master Gardener Programme show that a common theme from interviews with new growers participating in the programme is ‘growing more vegetables means more exercise and time being active and the opportunity to get fresh air’. Results show that 48% of the new growers spend 1-2 hour/week growing food and 50% spend more than 2 hours/week, including 7% that spend 8 or more hours/week. In addition, the new food growers ate and average of 4.5 portions of fruit and vegetables per days after being part of the programme for 12 month and 4.9 portions per day after being part of the programme for 36 months, which is above the national average of 4.1 for adults aged 19-64 (Kneafsey et al., in preparation).
References


Lineberger, S. E. and J. M. Zajicek (2000) School gardens: can a hands-on teaching tool affect students’ attitudes and behaviours regarding fruit and vegetables? HortTechnology 10,3 593-597


Ratcliffe, M. M., K. A. Merrigan, B. L. Rogers and J. P. Goldberg (2011) The Effects of school garden experiences on middle school-aged students’ knowledge, attitudes, and behaviours associated with vegetable consumption. Health Promotion Practice, 12. 1 36-43


Gardening and growing for people with dementia

Being in a garden and taking part in horticultural activities has been shown to be of benefit for people with dementia, with structured therapeutic gardening activities having a positive impact on sense of wellbeing, cognitive abilities, communication and engagement Detweiler et al., 2012 and Hewitt et al., 2013.

Background

Dementia is a long-term condition with a high impact on a person's health, personal circumstances and family life. Alzheimer's disease is the most common form of dementia and is generally diagnosed in people over 70 years of age. Early-onset dementia refers to the onset of symptoms before the age of 65. As well as having profound impact on the individual, dementia can also have high impact on family members and friends. Dementia results in a progressive decline in multiple areas of function including memory, reasoning, communication skills and those skills needed to carry out daily activities. Alongside this decline, individuals may develop behavioural and psychological symptoms such as depression, psychosis, aggression and wandering, which complicate care.

The National Dementia Strategy (2009), aims to ensure that improvements are made to dementia services across three areas: improved awareness, earlier diagnosis and intervention, and a higher quality of care (Department of Health, 2009). The Alzheimer's Society statistics show that there are currently 800,000 people living with dementia in the UK, and it is predicted that this number will rise to over one million people by 2021. It is estimated that dementia currently costs the NHS, local authorities and families £23 billion a year and this will grow to £27 billion by 2018 (Kane and Cook 2013). The Alzheimer's Society notes that the Welsh Assembly in its framework action recognises that low-level support services such as gardening clubs are vital, and reduce the need for more intrusive and costly care solutions (Kane and Cook, 2013).

Evidence of benefits of horticultural therapy for people with dementia

The UK National Institute for Health and Care Excellence (NICE) recommends that care plans should address activities of daily living that maximise independent activity, adapt and enhance function, and minimize need for support (NICE, 2011). The garden and the activity of gardening provides a non-pharmacological approach to address these goals and horticultural therapy can be utilized to improve the quality of life for the aging population and yielded high level patient/carer satisfaction, possibly reducing costs of long-term, assisted living and dementia unit residents (Detweiler et al. 2012; Gitlin et al, 2012).
A number of studies have shown the benefits of therapeutic gardens and horticultural activities for patients with dementia. In a review of the literature of the evidence to support the use of therapeutic gardens for the elderly, Detweiler et al. (2012) concluded that many preliminary studies have reported benefits of horticultural therapy and garden settings in reduction of pain, improvement in attention, lessening of stress, modulation of agitation, lowering of as need medications, and antipsychotics and reduction in falls.

Jarrot and Gigliotti (2010) evaluated responses to horticultural based activities for randomly assigned groups in eight care homes and compared with responses to traditional activities. They showed that horticultural activities reached groups of participants who would often be difficult to engage in activities and resulted in higher levels of adaptive behaviour and in active and passive engagement. Similarly, Yasukawa (2009) showed improvements in communication, engagement, behaviour and cognitive abilities in a group of patients with Alzheimer’s who participated in horticultural activity over a period of three months.

In a study investigating the use of horticultural therapy to prevent the decline of mental abilities in patients with Alzheimer’s type dementia, D’Andrea (2007) reported participation in horticultural activities resulted in maintenance of memory and sense of well-being and an overall higher functional level than the control group. Connell et al., (2007) compared outdoor and indoor activity programmes on sleep and behaviour in nursing home residents with dementia and showed that the outdoor activity group experienced significant improvements in sleep patterns and also a decline in verbal agitation.

Hewitt et al. (2013) evaluated the impact of therapeutic gardening for people with young-onset dementia, measuring outcomes for both participants with dementia and their carers. The conclusion from their preliminary study suggested that structured gardening over a 12 months period had a positive impact on the well-being, cognition and mood of people with young-onset dementia. Specific attention was drawn to the relationship between the well-being of participants and their cognition; the results of the study suggested that well-being can be maintained despite the presence of a cognitive deterioration. Self-identity and purposeful activity were reported as common themes as benefits of the gardening group, participants felt useful and valued and had a sense of achievement.

References


This factsheet was produced as part of the Growing Health project, run by Garden Organic and Sustain

To sign up to the Growing Health network visit www.growinghealth.info
Product sheets

www.sustainweb.org/resources/files/reports/GH_Social_Therapeutic_Horticulture_Project.pdf
Growth - Social and Therapeutic Horticulture Project

What is the project?
Gardening and growing your own food, in the garden at home, on the allotment or on a windowsill, has been proven to have many health benefits for young and old. It can be a fantastic therapy for people suffering mental ill health or those with physical disabilities, and a great way for people to come together to share knowledge and skills. Social and therapeutic horticulture helps to build confidence, improve communication and social skills, facilitate new learning and, of course, provide healthy food to enjoy. There has been a therapy garden at Ryton Organic Gardens since 1990, with two dedicated display gardens; The Therapy Garden and The Memorial (Sensory) Garden.

Target audience
In our organic gardens we are able to offer a safe and accessible environment for our clients, people with learning disabilities and different health and wellbeing issues, and provide a structured and appropriate work program to suit individual needs. Individuals are referred through different routes, primarily social services, or can be self-referred. Clients are allocated to a group that can accommodate their needs and they work to their personal learning goals engaging in wide-ranging gardening activities following the growing season. Activities are led by a qualified horticultural therapist. Clients can enrol for sessions in blocks of 12 weeks or for a period that suits them. The gardens have been designed to be accessible by wheelchair users.

Key Outcomes
- Help individuals gain confidence, self-esteem, respect for others and increased independence.
- Develop client social skills through team working and interaction with others.
- Provide the opportunity for outdoor physical activity to improve both the mental health and physical fitness of clients.
- Encourage clients to take home the organic produce that they have grown to help them achieve their '5-a-day'.
- Help to reduce and recover from stress by being in the outdoors and engaging in gardening activity in the natural environment.
- Learning through practice and develop knowledge and skills in organic horticulture, employability and sustainable living.

A typical day
The group arrive at 10am and enjoy some informal time to settle in and catch up before getting started on the activities for the day. Tasks are often short and varied to ensure continual skills development and that interest is maintained. There are regular breaks including coffee at 11am, lunch for an hour at 1pm and drinks again at 3pm. The session usually finishes at 4pm. Gardeners are encouraged to take home the harvested produce and spare plants when they are available. The group enjoy the use of a range of garden settings, inside work space, a greenhouse and a polytunnel for year round activities, whatever the weather.
Case study
One participant, aged 31, is autistic and has epilepsy. He joined the Growth Project in 2005. He initially came with a support worker as he lacked confidence, particularly when working in large groups. After just three months, he built up his level of skills, gained more confidence and now works happily as part of a team and travels independently. He is now a very reliable and capable member of the team. “It’s good exercise and the jobs are different every week” he said.

Related projects and organisations

**Thrive** - [www.thrive.org.uk](http://www.thrive.org.uk). Thrive uses gardening to bring about positive changes in the lives of people living with disabilities or ill health, or who are isolated, disadvantaged or vulnerable.

**Martineau Gardens** - [www.martineau-gardens.org.uk](http://www.martineau-gardens.org.uk). Martineau Gardens is a garden and wildlife oasis in the centre of Birmingham, maintained mainly by volunteers with mental health conditions and learning difficulties.

**Bridewell Organic Gardens** - [www.bridewellorganicgardens.co.uk](http://www.bridewellorganicgardens.co.uk). Bridewell Organic Gardens is committed to offering worthwhile work opportunities in a therapeutic setting to people recovering from mental illness. The overall aim is that this will contribute toward re-establishing a sense of stability and greater wellbeing in gardeners who attend.

---

Elaine Hibbs, Horticultural Therapist
Ryton Organic Gardens,
Coventry, CV8 3LG.
[ehibbs@gardenorganic.org.uk](mailto:ehibbs@gardenorganic.org.uk)
02476 308 220
Growing Enterprise

What is the project?
Gardening and growing your own food has proven to be therapeutic and can provide physical, mental, emotional and social benefits for a wide range of individuals. Horticultural therapy can promote healthy lifestyles by helping people keep active, encourage healthy eating, provide social opportunities, build confidence, link communities, support the development of new skills and work behaviours, and allow for relaxation and recovery from stress or illness. The Growing Enterprise project was established by Garden Organic at Ryton Organic Gardens in September 2013. All activities are facilitated by a fully trained horticultural therapist, supported by school or college staff. The project was initially funded for 2 years by The Daylesford Foundation and The Sheldon Trust.

Target audience
The project provides opportunities for young people with Special Educational Needs (SEN) and/or challenging behaviour to learn about organic gardening and making horticultural related products for sale within a small enterprise. On the projects, students work in small groups of up to eight, but often less, which ensures that individual needs can be addressed and barriers to learning broken down. Sessions last for about 2 hours and groups usually take part in weekly sessions over a school term. This enables them to experience a variety of horticultural tasks linked to the growing season; seed sowing, crop planning, organic crop maintenance, harvesting, processing and tasting products ready for sale.

Outcomes
As well as gaining knowledge and skills in organic horticulture, students develop social skills, build self-esteem and learn about running a small business while enjoying the gardens and learning about organic food growing. The young people are learning entrepreneurial skills in a real life context; growing and making products to sell to real customers, often in a public setting, designing products, marketing and handling money. The work that students complete during the sessions can also help to support them in achieving a range of qualifications which they are working on with their school or college, such as OCN, City and Guilds and ASDAN courses.

A typical session
As much as possible sessions are held outside in the project’s dedicated space at Ryton Organic Gardens. Students take part in a practical horticultural activities suited to their ability and mobility needs. The growing area utilises raised beds at various levels, crops in large tubs and a greenhouse with tasks being chosen specifically to ensure inclusivity and accessibility for all. During the 2 hour session students will have a 15 minute break and often enjoy a walk in the wider gardens to enjoy seeing the gardens change through the season.
Case study
One student has severe visual and hearing impairment and mobility difficulties. Unsure to begin with, he learned to enjoy exploring the gardens through his senses and became much more confident in the unfamiliar surroundings. When he started the sessions he did not enjoy touching soil and found it difficult to concentrate on the tasks. Towards the end of the term however he was able to help sow seeds in compost and was open to feeling new textures and sensations. School staff who supported the sessions remarked at how calm and engaged he was while he was with the project and were delighted by what he had been able to achieve.

For more information
http://www.gardenorganic.org.uk/growing-enterprises-ryton-organic-gardens

Related projects and organisations
Thrive- www.thrive.org.uk. Thrive uses gardening to bring about positive changes in the lives of people living with disabilities or ill health, or who are isolated, disadvantaged or vulnerable.

Martineau Gardens- www.martineau-gardens.org.uk. Martineau Gardens is a garden and wildlife oasis in the centre of Birmingham, maintained mainly by volunteers with mental health conditions and learning difficulties.

Bridewell Organic Gardens- www.bridewellorganicgardens.co.uk. Bridewell Organic Gardens is committed to offering worthwhile work opportunities in a therapeutic setting to people recovering from mental illness. The overall aim is that this will contribute toward re-establishing a sense of stability and greater wellbeing in Gardeners who attend.

Elaine Hibbs, Horticultural Therapist
Ryton Organic Gardens,
Coventry, CV8 3LG.
ehibbs@gardenorganic.org.uk
02476 308 220
Materials

Growing Health is a national project run by Garden Organic and Sustain, funded by the Tudor Trust, to see how community food growing can be routinely used by the health and social care services as a way of promoting health and wellbeing for a range of individuals and population groups.

www.growinghealth.info

Health
Growing
Food growing for health and wellbeing

Growing Health: The health and wellbeing benefits of food growing

How the health service can use food growing to deliver health outcomes

How the health service can use food growing to deliver health outcomes

Finding out more about how you or your service or department could be using food growing as a way to deliver health outcomes.

If you are interested in finding out more about how you or your service or department could be using food growing as a way to deliver health outcomes get in touch.

Find out more

Food growing projects

How can public health, GPs and health commissioners work with food growing projects?

The Growing Health project has seen how health professionals, the NHS and others with responsibility for delivering health are using food growing to meet their outcomes. Investing and supporting this work results in a cost effective way to improve health or well-being of individuals and population groups.

Examples of how this has worked include:

・ Commissioning community food growing projects to deliver health outcomes.
・ Supporting the setting up of development of projects, including funding.
・ Providing access to land and other resources such as staff support.
・ Encouraging and enabling for health professionals to deliver health outcomes.
・ Training on using food growing for health professionals as part of NHS staff skill and continuing professional development.

Food growing projects have improved health or well-being at a cost effective way to deliver health outcomes. Investing and supporting this work results in a cost effective way to improve health or well-being of individuals and population groups.

Food growing projects have improved health or well-being at a cost effective way to deliver health outcomes. Investing and supporting this work results in a cost effective way to improve health or well-being of individuals and population groups.

Food growing projects have improved health or well-being at a cost effective way to deliver health outcomes. Investing and supporting this work results in a cost effective way to improve health or well-being of individuals and population groups.
Why support food growing activities?

It is widely recognised that gardening and food growing has a positive impact on people's health and wellbeing and there is a growing body of evidence to support this.

Regular contact with plants and the natural environment can improve mental wellbeing and combined with the activity of growing food it can help improve physical health for a wide range of abilities and ages.

Regular involvement in gardening can:

• Improve psychological health, by reducing stress, the severity of stress and associated depression.
• Increase physical activity, burn calories and contribute to maintaining a healthy weight and reduce the risk of obesity.
• Help with rehabilitation or recovery from surgery or other medical interventions.
• Alleviate the symptoms of illnesses like dementia and Alzheimer’s disease, such as agitation and aggressive behaviour.
• Contribute to improved social interactions and community cohesion.
• Provide access to healthy, affordable locally grown fruit and vegetables, as well as improving attitudes to healthy eating.
• Introduce a way of life to help people improve their wellbeing in the longer term.

The public health benefits of community food growing

As the wider determinants of health model shows there are many social, economic and environmental factors that impact on health. Community food growing projects can have positive outcomes on these:

• Individual: Provides a healthy lifestyle with regular outdoor activity and contact with nature which helps improve physical and mental health.
• Social and community: Engages the community and enhances mechanisms for getting people involved in things that matter to them.
• Activities: Promotes health and wellbeing as well as an opportunity for physical exercise.
• Built environment: Promotes health and wellbeing as well as an opportunity for physical exercise.
• Natural environmental factors: Enhances the natural environment and engages people with nature.

Sydenham Garden in London is commissioned by Lewisham Clinical Commissioning Group (CCG) to provide garden sessions for adults experiencing mental ill health and sessions for people with early stage dementia. It has an established health professional referral network in place, covering over 20 agencies.

Sydenham Garden’s services fit with local need and the Joint Strategic Needs Assessment for Lewisham highlights that mental health inequalities are higher in Lewisham compared to the rest of London. This poor mental health in turn has a great social and economic impact as well as leading to a range of negative health outcomes. As the Bradford District exhibits significant mental health inequalities, the work of Bradford Metropole District Council (part of Bradford Metropolitan District Council) to commission the project is critical. The project (CFSP) is currently funded by Public Health England.

The Bradford District exhibits significant health inequalities and the aim of Gardening for Health (G4H) is to reduce these inequalities. The work has been funded through NHS/CCG since 2008. The project’s model is based on the model of the NHS/CCG-funded ‘Growing Health’ initiative, which is part of the Bradford Community Environment Project (CEP) and is run by Public Health England.

Growing Well is a Health & Wellbeing Case Study that provides a healthy lifestyle with regular outdoor activity. Growing Well is a Health & Wellbeing Case Study that provides a healthy lifestyle with regular outdoor activity.

Gardening for Health (G4H) is currently commissioned by Bradford Metropolitan District Council (part of Bradford Clinical Commissioning Group) and is funded by Bradford Clinical Commissioning Group (CCG). It provides garden sessions for adults experiencing mental ill health and sessions for people with early stage dementia. It has an established health professional referral network in place, covering over 20 agencies.
The Case Studies

www.sustainweb.org/publications/growing_health_case_study_sydenham_garden
www.sustainweb.org/publications/bradford_community_environment_project/
Sydenham Garden
Sydenham, London Borough of Lewisham

Growing Health Case Study

Health area: Mental health and dementia

This series of Growing Health case studies provide examples of projects which use food growing in the community to provide health benefit.
Key client groups

Sydenham Garden is a unique wellbeing centre utilising its gardens, nature reserve and activity rooms to help people in their recovery from mental and physical ill-health in Lewisham.

They aim to do this through providing co-workers (the name they give to their primary beneficiaries) an opportunity to take part in one of four main projects, along with many supplementary activities and clubs. Co-workers are referred to the project via their GP or key worker. They aim to promote inclusion and reduce prejudice by bringing together co-workers with different degrees of mental and physical ill health, volunteers and members of the local community to work together.

Summary of services

Sydenham Garden is an award-winning charity providing gardening, nature conservation and creative opportunities for the wellbeing of local residents. Patients are referred to one of their projects through their GP or key worker. Referred patients (known as co-workers) can work in the community garden and nature reserve and/or with the Art and Craft group. They also provide accredited training and help with progression to further education, volunteering opportunities or reemployment.

Co-workers play an active part in the community garden and help shape the project as a whole.

Funding and Partners

The majority of the funding comes through grants, trusts and foundations, development organisations and Lewisham Council. In 2007, Sydenham Garden was awarded a five year grant from the Big Lottery Fund Reaching Communities programme. It was also part of the Mind Ecominds project. Since May 2013 Sydenham Garden has also been commissioned by Lewisham NHS.

Background

Sydenham Garden’s mission is to promote the physical and mental wellbeing of south London residents, in particular by providing:

- a community garden where horticulture is used for therapy and rehabilitation
- opportunities for training for work and education
- opportunities for artistic and creative expression
- the protection and preservation of the environment for the benefit of the public through nature conservation or the promotion of biological diversity.

The garden was founded in 2002 by a small group of local residents including a local GP had the vision and dedication to convert a neglected nature reserve into a community garden. The laying out of the garden began in 2005 and it was officially opened in April 2006.

The organisation is run by a large team of over 75 team members, 8 of whom are paid employees. There is also an Art & Craft project worker which is an unpaid role. There are 9 trustees who responsible for the strategic direction of the charity. Volunteers are crucial to the Garden both in terms of running sessions and providing office support.

Links with local health priorities and services

Sydenham Garden is commissioned by Lewisham Clinical Commissioning Group (CCG) to provide garden sessions for adults experiencing mental ill health and sessions for people with early dementia. It has an established health professional referral network in place, covering over 20 agencies. Sydenham Garden’s services fit with local need and the Joint Strategic Needs Assessment as the prevalence of mental illness is higher in Lewisham compared to the rest of England and for most of London. This poor mental health in turn has a great social and economic impact as well as leading to range of negative health outcomes. Lewisham have highlighted that prevention of conduct disorder through social and emotional learning programmes result in total returns of £83.73 for each pound invested (Knapp et al, 2011).
Service aims and delivery

There are a variety of therapeutic gardening sessions through the week for co-workers. Three of these projects are focused on Adult Mental Health and include gardening, art and craft, cooking and opportunities to achieve recognised qualifications. The fourth project is focused on Dementia and includes all the same elements but underpins them with Cognitive Stimulation Therapy (CST). Each co-worker sets their aims with the staff and volunteer team, and takes on tasks to help them to engage with the project and the land. A typical placement lasts between 12 and 18 months which enables co-workers to fully benefit from their personal development programme. During 2011-12 Sydenham Garden received 173 referrals and held 79 introductions with potential co-workers. In 2012, 111 individuals attended at least one session, including 76 garden sessions.

In partnership with MindCare and Lewisham CCG, Sydenham Garden is offering programmes of therapeutic activities designed to support people in the early stages of dementia. Sow & Grow is a course that runs on weekly basis and lasts for six months involving gardening, cooking and craft activities, as well as opportunities for reminiscence, social interaction, reflection and discussion.

Aims of Sydenham Garden

- To contribute to the improvement of the quality of life of people experiencing social exclusion through mental ill health or significant illness living in Sydenham and surrounding neighbourhoods within the boroughs of Lewisham and Bromley.
- To contribute towards the building of community cohesion and inclusiveness.
- To build the skills and capacity within the local community and to support community participation.
- To inform and engage local people in addressing their own and wider social, economic and environmental wellbeing.
- To reduce prejudice and to raise awareness, inform and influence others on the needs of those with mental ill health.

Objectives of Sydenham Garden

- To provide health, social, environmental, educational, and economic and leisure opportunities within a framework of a community garden and nature reserve.
- To provide opportunities for local people to come together through volunteering and creative activities, within the context of a community garden and nature reserve facility.
- To provide a locally managed community facility, that is accessible and open to all.
- To develop the community facility based on sustainable development principles.
- To provide community-based, community-inclusive services and activities.
Outcomes and key achievements

Every year they undertake an evaluation of their services; these evaluations have become more thorough and have implemented recognised measures over the past 2 years. They also had an independent evaluation carried out and published in 2011 which can be found on their website sydenhamgarden.org.uk/annual-evaluation/

In 2015 the evaluation highlighted Sydenham Garden’s growth over the past 30 months, demonstrates that Sydenham Garden is reaching a diverse range of ethnicities and an even gender split and it shows strong evidence that Sydenham Garden is delivering significant health and social benefits for co-workers.

In order to assess improvement in physical health, mental health, social interaction, quality of life, confidence and independence levels of co-workers who completed their placement, Likert scale questionnaire (consisting of six items) was used. The questionnaires were completed by the co-workers when they started on the Garden project and then at quarterly intervals until they completed their placement. 39 co-workers completed the questionnaires more than once. A random sample group of 7 co-workers also completed WEMWBS (Warwick Edinburgh Mental Wellbeing Scale) on 3 or more occasions to assess their wellbeing in comparison to the population and to monitor improvements during their placement. Co-workers were asked open-ended questions in order to reflect any changes in any of the six topic areas, along with setting their own goals and targets for their placement.

Quantitative study based on Likert Scale questionnaire
- 21 out of 39 co-workers (54%) recorded a positive change in their ability to undergo physical activity.
- 22 out of 39 co-workers (56%) recorded a positive change to their mental wellbeing.
- 22 out of 39 co-workers (56%) recorded a positive change to their social inclusion and interaction.
- 24 out of 39 (62%) co-workers recorded a positive change to their quality of life.
- The following 2 questions we only answered more than once by 15 co-workers who completed their placement during the period. This was due to the questionnaire having the questions added after the other 24 co-workers had already begun their placement.
- 7 out of 15 co-workers (47%) recorded a positive change to their level of independence.
- 12 out of 15 co-workers (80%) recorded a positive change to their confidence.

Quantitative study based on WEMWBS questionnaire
- Group initial average: 38
- Group completed average: 46
The overall group score improved by 21% during the garden sessions. The group average initially scored 38 and improved to scoring 46 by the time they finished. While the group didn’t achieve an improvement to bring them up to the national average of 50.7, their score significantly improved by 8 points while they were on their garden placement.

Qualitative study
Interview responses were almost entirely positive about participation in Garden sessions.
- **Ability to undertake physical activity:** Some co-workers reported that taking part in Garden sessions enabled them to do more physical activity and that they enjoy the physical side. There was mention that it leads to greater satisfaction with other activities like eating and drinking.
- **Mental wellbeing:** Co-workers and carers found Garden sessions very helpful in improving their mental health giving them “purpose” “strength” “passion” and “hope”. It is clear that co-workers perceive Garden sessions to be beneficial for their mental wellbeing.
- **Social inclusion and interaction:** All interviewees mentioned that both their social inclusion and their confidence to interact improved.
- **Confidence:** Co-workers feel that taking part in Garden sessions helps to increase their confidence “to be themselves”, to use their skills, to interact with others and to take part in other activities.
- **Independence:** Some co-workers mentioned that Garden sessions have helped them to work independently of others.
- **Life developments:** Co-workers mentioned various and broad developments in life outside Sydenham Garden, many of which they directly cited the Garden session as the influencing factor. These included: Gardening and starting a business.
Key challenges

**Funding:** Covering the cost of the programme is a continual challenge for the garden. For example, 40% of the funding comes to an end March 2014, which will be a large gap to cover.

**Health and Social Care budget cuts:** As referrals come from these sectors there may be a challenge in keeping the level of referral at the current level.

Key opportunities

**Links with other organisations:** Currently they collaborate closely with Bromley Mind, which means they can provide a better service with more expertise as well as a financial input.

**Commissioning:** They have recently received a three year contract, which will be used to prove the benefits of the service to the NHS.

**Personalised Budgets:** With the introduction of personal budgets in social care, there is an opportunity for people to use their own budgets to access services at Sydenham Garden.

Supporting documents

The full report can be downloaded from sydenhamgarden.org.uk/annual-evaluation

Key contact details

Tom Gallagher, Centre Manager, Sydenham Garden Resource Centre, 28a Wynell Road, London SE23 2LW

020 8291 1650
info@sydenhamgarden.org.uk
www.sydenhamgarden.org.uk

Produced November 2013
Updated January 2016

**Growing Health** is a national project run by Garden Organic and Sustain, which is funded by the Tudor Trust, to see how community food growing can be routinely used by the health and social care services as a way of promoting health and wellbeing for a range of individuals and population groups.

To sign up to the Growing Health network visit www.growinghealth.info
Bradford Community Environment Project (BCEP)
Gardening for Health

Growing Health Case Study
Health area: Reduce local inequalities in health and wellbeing

This series of Growing Health case studies provide examples of projects which use food growing in the community to provide health benefit.
**Key client groups**

Local residents from high risk or ‘hard to reach’ groups.

**Summary of services**

Gardening for Health (G4H) aims to reduce local inequalities in health and wellbeing by encouraging food growing and healthy eating. G4H works across many different sites and with a variety of clients. It has 16 regular groups in all kinds of locations: school grounds, community centre gardens, mental health units, a drug/alcohol abuse unit, a medical centre, and allotments.

The project targets black and ethnic minority (BME) communities, who can face particular health issues and do not always access mainstream services and is especially successful in reaching diverse communities. Vulnerable clients are also targeted, for example those in mental health units, refugees and asylum seekers, and those who have experienced homelessness or drug/alcohol abuse. However, no client that can be accommodated is turned away, even if initially they are not from the target groups.

Group members eat home-grown fruit and vegetables and take some home to share with family and friends. Cooking sessions are incorporated in all regular groups. The programme is especially successful in reaching diverse communities. For the last four years, G4H has also been able to offer free starter allotment plots to Bradford residents. To date, 45 tenants have given these a go, some moving on to their own plot.

**Background**

Bradford Community Environment Project (BCEP) started in 1996 as a small organisation set up to deliver the Urban Renewal Programme with four staff based in different locations in areas of deprivation in inner city Bradford. In 2000 it became a non-profit company limited by guarantee and in 2002 a registered charity. There are now 20 staff members, mostly part-time, which make up the equivalent to 16 full time staff. This makes BCEP Bradford's largest environmental charity, running a variety of environmental schemes across Bradford.

BCEP’s G4H work has grown from a single weekly group on an allotment to providing 16 regular groups across the district, reaching over 2000 people per year. Six part-time staff run the G4H programme, supported by two part-time practical people who develop and maintain the sites, doing the tasks that the groups cannot manage or lack time to do. Partner agencies are important in getting clients involved, and often provide additional staff to support participation. Volunteers’ support is crucial to G4H's work, particularly on G4H's bigger sites. Commitment and flexibility are the watchwords of the team.

**Funding and partners**

Over the years, their work has been funded by a range of agencies, including the Environmental Action Fund, the Tudor Trust, the Lankelly Foundation, NIACE, the Big Lottery Fund and Shell. It has expanded or shrunk to fit the resources available, and shifted focus, for example from sustainable lifestyles, education and, now, to health. G4H is currently commissioned by Public Health and supplemented by two schools paying a discounted rate towards their weekly groups.

**Links with Local Health Priorities and Services**

G4H is currently commissioned by Public Health (part of Bradford Metropolitan District Council). The work has been funded through NHS/PCT since 2008. The Bradford District exhibits significant health inequalities: life expectancy of a male living in Ilkley (a small town just 12 miles from Bradford) is 12 years longer than a male living in some of the inner city areas of Bradford. It is this difference that the programme seeks to reduce.

Participants can refer themselves, although particular groups are targeted directly, for example school children, refugees/asylum seekers and patients in mental health units.
Outcomes and key achievements

A major social accounting exercise was carried out on the food growing work in 2010, at that time entitled ‘Grow Organic’ (available via www.bcep.org.uk). This clearly demonstrated the impact the programme was making, the benefits perceived by the clients and its high regard amongst participants and partner agencies. Although an elucidating and very thorough approach, it was, however, time-consuming and therefore expensive.

Currently, evaluation is carried out through collecting participants’ oral contributions and observations of their involvement. Regular attenders are intermittently asked for their own perceptions as to whether they benefit in terms of their physical health, mental wellbeing and awareness of healthy eating. These ‘surveys’ are recorded in the quarterly reports for each group and collated annually. In addition, written questionnaires are used occasionally but only where appropriate. Partner agencies are asked to complete an annual BCEP satisfaction survey. Each year, four anonymous case studies are collected.

Numbers involved 2013-14

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of clients accessing any part of service</td>
<td>2252</td>
</tr>
<tr>
<td>No of regular groups</td>
<td>15</td>
</tr>
<tr>
<td>No of ‘taster’/ one-off sessions</td>
<td>45</td>
</tr>
<tr>
<td>No of cook what you grow sessions</td>
<td>152</td>
</tr>
<tr>
<td>Sampled clients reporting improved physical health</td>
<td>104/109=95%</td>
</tr>
<tr>
<td>Sampled clients reporting improved awareness of healthy eating</td>
<td>185/190=97%</td>
</tr>
<tr>
<td>Sampled clients reporting improved mental wellbeing</td>
<td>191/192=99%</td>
</tr>
</tbody>
</table>

An issue for G4H is the pressure to change the current informal evaluation methods into nationally recognised ways of demonstrating impact. Issues identified by the team include the level of written English language skills of many clients, the vulnerable nature of participants which may mean survey questions cause clients distress, and the imposition of an additional barrier to participation.

Aims

To reduce local inequalities in health and wellbeing by encouraging food growing and healthy eating, particularly among residents from high risk or ‘hard to reach’ groups.

Objectives

To encourage local residents to grow their own food which increases physical activity, improves mental wellbeing and promotes a healthier diet which contributes to improved health outcomes.
Key challenges

Public Health managers appreciate the service and responsive delivery models. However, this flexibility causes problems for a commissioning body which is used to fixed programmes like weight management, for example, where there are a certain number of sessions of standard length and content with a fixed outcome at the end of the programme. Growing food doesn’t fit this model, as things grow at different rates at different times of year, crops are harvested when ready, and the weather affects what can be done.

Key opportunities

Having Public Health managers who understand what G4H can do has been crucial to the success of the programme to date.

The G4H team is actively pursuing opportunities to strengthen links with GP surgeries and to extend work in schools not only with children but also their families. It is hoped this will be supported by Health and Wellbeing funding.

Contact details

Bradford Community Environment Project (BCEP) is a registered charity number 1093783 and a not-for-profit company registered in England and Wales number 4111491.

Tel: 01274 223236
Email: info@bcep.org.uk
Web: www.bcep.org.uk
Facebook: BCEP Gardening for Health

Produced April 2015

Growing Health is a national project run by Garden Organic and Sustain, which is funded by the Tudor Trust, to see how community food growing can be routinely used by the health and social care services as a way of promoting health and wellbeing for a range of individuals and population groups.

To sign up to the Growing Health network visit www.growinghealth.info
A Growing Health Tool Kit
A community food grower’s guide to working with the health service

A Sustain publication
June 2016

Growing Health is a national project run by Garden Organic and Sustain, which is funded by the Tudor Trust, to see how community food growing can be routinely used by the health and social care services as a way of promoting health and wellbeing for a range of individuals and population groups.

www.growinghealth.info

Garden Organic: The national charity for organic growing, is the working name of the charity ‘Henry Doubleday Research Association’. Garden Organic has been at the forefront of the organic horticulture movement for over 50 years. Through its 22,000 members and the thousands of individuals touched by its wide-ranging projects carried out across the UK and overseas, Garden Organic spreads the organic growing message, demonstrating its lasting benefits to the mental and physical health of individuals and the communities, schools and workplaces in which they grow.

www.gardenorganic.org.uk

Sustain is a Registered Charity No. 1018643