

Food Cultures: *Growing Cooking Eating*

“An exploration of improving food practices in young men
and older adults in Plymouth”

Research Report

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Executive summary

This project explored how food projects can influence food related skills and promote behaviour change in young men and older adults in Plymouth. Young men are known to have a low intake of fruit and vegetables (NDNS 2011) and many older people are vulnerable to poor nutrition (CWT 2004); currently there are relatively few food intervention projects targeting these two groups.

In 2010 eight food projects in Plymouth were funded to take part in the 'Food Cultures Project', an innovative partnership between agencies and civic organisations from the public health, social care, youth and social enterprise sectors. An evaluative research framework was also developed to measure outcomes. This report outlines the methods and findings of this work and concludes by considering the implications and recommendations for further development. This report also explores the productive aspects of such "new partnership" working between health and higher education institutions and the growing social enterprise sector.

A mixed methods approach was used: firstly a quantitative survey was designed for assessing, at baseline and endpoint, outcomes common to each project: i) food growing confidence and skills, ii) cooking confidence and skills and iii) eating practices (fruit and vegetable, cooking 'from scratch'). Secondly, an endpoint qualitative survey captured the feelings and experiences emerging from the project participants. This report considers the combined findings of all eight projects, and also focuses in more detail on case studies of two of the projects.

In summary, the participants (n=42) reported increases in all food growing activities, and a notable 36% decrease in 'not doing any growing at all'. There was an increase (10%) in meals cooked 'from scratch' alongside a 34% decrease in convenience food consumption. Confidence in growing and cooking activities increased for all participants. There was an increase in the consumption of fruit (0.31) and vegetable (0.3) portions. Skills gained from participation included chopping vegetables, cooking, healthy eating, and team-working. Change was reported for healthy eating awareness and social connections. Generally, participants boosted their self-esteem. Participants enjoyed the 'social health' approach, e.g. going on trips out and activities which encouraged social interaction. There was no doubt that this innovative approach worked particularly well for the younger groups - there was evidence of improved personal growth (health, confidence, motivation, skills) and community development (teamwork, social connections and engagement). The older groups demonstrated similar trends, although social engagement was less apparent in the findings, suggesting a need to develop more appropriately tailored approaches for some older population groups.

The methodological limitations of this research are clearly outlined in the discussion section of the report and they have been used to help shape the recommendations for further progress. These projects showed that innovative food projects can improve confidence, self-esteem and food skills for younger and older people. At a time of radical change within the health service, this work demonstrates effective grass-roots partnership working ‘in action’.

Recommendations are made to continue funding small scale food projects and to develop the research tools useful for assessing such projects. The sustainability of such projects is considered - and the importance of effective, diverse and inventive partnership working. Working with small groups in real world social settings can maximise positive health impacts and cost-efficiencies.

As well as the potential greater impacts (and cost savings) of social, group approaches delivered in real world settings, the ‘social enterprise’ approach is also of interest in its consideration of possible income generation route and additional related outcomes around employability and community cohesion.

Project Partners, Project Activity and Description	
Projects	Project Description
What’s Cooking? Groundwork Southwest	This project worked with both older and younger men referred through mental health services. Participants worked on an allotment and undertook cooking activities with a horticultural healing specialist.
Greenbank Young Men’s Project Youth Service	The project worked with young men who were Not in Education, Employment or Training (NEET) through shared cooking activities and food related trips such as farm visits and sea fishing.
Devonport House Salvation Army	Working with a group of young men with multiple issues the project employed a professional chef to teach cooking techniques and skills, leading them to cook for other residents. They also undertook trips and developed a growing area.
Wild Food Adventures Diggin It	The project worked with a group of young men and used wild food foraging and bush craft to teach young people about cooking and food growing.
Tea Dances Project Zebra Collective	Based out of the Devonport Guildhall and run by the Zebra collective, this project worked with older people to deliver ‘healthy tea dances’ and used social activities and dance to promote learning about food health.
Boxing Clever Routeways	Working with the Men’s Shed Project, this project used the idea of a men’s space to teach older men about food growing, cooking and health eating.
Sovereign Housing New Friars Court & Notre Dame House	Working in residential care settings and used food growing, collective cooking and eating and IT training to promote healthier eating among the residents.
Wellcome Hall Food is fun	This project worked with a lunch club for older people. A chef worked with the kitchen staff and lunch club to diversify the menu and improve nutrition.

1.0) Introduction

Late in 2010 the Real Ideas Organisation CIC (RIO) was commissioned by the NHS to coordinate the delivery of eight action research¹ projects with civic sector partner organisations in Plymouth. The idea was to develop innovative approaches to improve food practices and health for participants from some of the city's most deprived communities. Whilst working to promote behaviour change for the participants, these projects, also aimed to research how food growing and healthy, cooking and eating activities, may influence such behaviour change. As part of this programme of work, an evaluation research framework was developed to explore the food practices of participants

The project was based on initial wider research that identified two groups as being particularly vulnerable to inadequate nutritional intake, whilst also receiving relatively little targeted intervention support. These groups are:

- Young adult males (16-24 age group) – this group has been identified as having low fruit and vegetable consumption (Gregory et al, 2000; NDNS, 2011)
- Older people – this group has been identified as vulnerable to variable nutritional standards both in care homes and in their own homes, particularly where isolation is an issue (CWT, 2004)

There was also the assumption that if people were engaged in a variety of enjoyable food growing, collective cooking and shared eating activities then this could have a positive impact on behaviour, ultimately improving eating, through social approaches; social approaches which are inherent to many social enterprise activities. The project set out to explore innovative approaches to improve eating habits and to assess their effectiveness and impact. Innovative aspects included cultural activities, such as group tasks, trips and visits, as well as using related, and requested, provision such as IT, with the view to creating additional incentives for participants. The longer term aims were to sustain activity beyond the funded programmes, and to consider the development of further social enterprises. At a time of radical change within the health service, there was also an interest in the wider processes involved for the health sector working with the civic sector and to see how this project could inform future commissioning policy for the health sector.

In summary, the overall aim of the project was to deliver sustainable food activities to improve health outcomes for young adults and older people in priority areas of Plymouth.

¹ Action research in a social enterprise setting is defined as project delivered with real communities where there is both an emphasis on gaining research intelligence and practical outcome for the participants. There is desire for the research to actively inform and shape practice in real time supporting an on-going growth in activity and participant outcomes.

The project set out to:

1. Realise food related behaviour change in participant groups
2. Capture research intelligence by developing methods for measuring relevant outcomes
3. Embed models to ensure the sustainability of the various activities
4. Inform policy and working practice between the Health, Adult Social Care, Youth, Academic and the Civic Sectors.

The primary focus of this project was exploratory research into how food education programmes, using growing, cooking and eating activities, delivered in an *enjoyable* way with an emphasis on social interaction, can influence food practices and promote behaviour change.

Secondary parameters relate to how this project could inform policy and steer commissioning by feeding into cultural understanding of the realities of innovative approaches to partnership working.

2.0) Process, Projects & Partners

RIO as the lead organisation engaged Plymouth University as the research partner and the Soil Association for additional consultancy support. A steering group was established with Plymouth NHS and the research methodology and data collection tools were developed, overseen by academic colleagues at Plymouth University. Once in place a call for innovative food projects ideas and project proposals was put out across Plymouth’s civic sector organisations with specific criteria for selection. With a maximum budget of £4000 civic sector organisations were asked to respond to the brief with ideas. Following multiple submissions, eight projects were assessed and then commissioned to be delivered (Table 1 below).

Table 1. Eight Project Partners, Project Activity and Description		
Project and Delivery Partner	Project Activity	Project Description
What’s Cooking? Groundwork Southwest	Growing ✓	This project worked with both older and younger men referred through Plymouth Options mental health programme. Participants worked on a community allotment and undertook shared cooking experiences with a horticultural healing specialist.
	Cooking ✓	
	Eating ✓	
Greenbank Young Men’s Project Youth Service	Growing	The project worked with a group of young men who were Not in Education, Employment or Training (NEET) and engaged them in shared cooking experiences and food related trips such a farm visits and sea fishing.
	Cooking ✓	
	Eating ✓	
Devonport House Salvation Army	Growing ✓	The project worked with a group of young men, often with multiple issues. They worked with a professional chef, learning cooking techniques and skills leading them to cook for other residents. They undertook various trips and developed the growing area at the hostel further.
	Cooking ✓	
	Eating ✓	

Wild Food Adventures Diggin It	Growing ✓	The project worked with a group of young men and used wild food foraging and bush craft to teach young people about cooking and food growing.
	Cooking ✓	
	Eating ✓	
Tea Dances Project Zebra Collective	Growing	Based out of the Devonport Guildhall and run by the Zebra collective, this project worked with older people to deliver 'healthy tea dances' and used social activities and dance to promote learning about food health.
	Cooking ✓	
	Eating ✓	
Boxing Clever Routeways	Growing ✓	Working with the Men's Shed Project, this project used the idea of a men's space to teach older men about food growing, cooking and health eating. They incorporated cooking demo's and trips with regular social meet ups.
	Cooking ✓	
	Eating ✓	
Sovereign Housing New Friars Court & Notre Dame House	Growing ✓	Working in two residential care settings this project used food growing, collective cooking and eating and IT training to promote healthier eating among the older residents.
	Cooking ✓	
	Eating ✓	
Wellcome Hall Food is fun	Growing	This project worked with a lunch club for older people based out of welcome hall. Professional chefs worked with the kitchen staff and lunch club members to diversify the menu and improve nutrition.
	Cooking	
	Eating ✓	

The desire for innovation and new ideas to improve food practices resulted in embracing a broad range of projects. Common to all were elements of education around food growing or sourcing, cooking and eating together; also, that the projects were in part designed by participants, to be fun and enjoyable.

This piece of work was considered 'exploratory', and shows how research methods can be developed and employed in a cross partnership match-funded project in order to enhance local participation and to contribute to improving the health of urban hard to reach communities. This work should then inform how future work can better embed food activities in these 'at risk' groups.

The commissioners of this work were interested in developing knowledge and further appreciation of the food-related issues faced by marginalized and traditionally hard to reach population groups in Plymouth city. This report highlights the importance of good food project management and how vital it is to incorporate evidence based evaluation methods at the outset, to facilitate the measurement of outcomes. Finally, it emphasises the many challenges involved in cross sector partnership working, particularly during a time of radical



Participants from Devonport House

structural organisational change.

3.0) Research Methodology

The research element involved quantitative and qualitative methodologies, with three strands of evaluation activity (see table 2 below). The quantitative tool was designed to assess the key measurable outcomes common to each project, based on simple behaviour changes embedded in each project: growing confidence and skills, cooking confidence and skills and eating practices (fruit and vegetable consumption; cooking from basic ingredients). The qualitative tool was designed to capture feelings and experiences emerging from participating in the project. The process element captured other important information, e.g. what happened during the project, resources used, venue, attendance etc.

All data collection tools can be found in Appendix 1 p 31.

Table 2. Three strands of evaluation activity – data collection tools		
Tool	When used	Key outcome measures
Quantitative survey	Baseline and endpoint questionnaires	Closed questions to assess participants’ food growing and cooking confidence/practices; self- reported eating habits. Response categories included Likert scales (confidence) and tick boxes. There was one open-ended question relating to participant’s perception of ‘healthy’
Qualitative survey	Endpoint questionnaires	Open ended questions to gain insight into participant’s overall experience and enjoyment within the project. Questions topics included new skills gained, any changes and enjoyment.
Process evaluation	Practitioner/professional records	Completed by practitioner/professional working with the group, detailing what happened in each session, attendance, venue, resources etc.

As all projects were slightly different in their approach, not all project included all three elements of growing, cooking and eating (see table 1 above and limitations section).

3.1) Quantitative survey design

Measurement of dietary intake is complex and the most appropriate measurement method depends on various aspects including project objectives and type of data required (NOO 2010). For the purposes of this study, methods for exploring cooking, growing and eating practises were required. The quantitative tool was based on the validated Big Lottery CORE Questionnaire (CLES, 2010),

which contains simple wellbeing questions relating to healthy eating. Cooking questions were based on a questionnaire developed for the Cook Well project which has been validated for use in evaluating cooking skills interventions (Barton et al 2011). Finally, questions relating to food growing were included, based a similar format to the cooking questions. As no validated questionnaire was easily identifiable, these questions were developed by consulting with various growing experts to ensure their content was appropriate.

Questions 1 – 5: Cooking

Questions 1 – 5 explored the participants cooking practises. Whereas question 1 looked at current cooking behaviour, questions 2 -5 looked at the participant's confidence with cooking and trying new foods and recipes. Question 1 gave the participants a series of options (a – e), questions 2 – 5 employed a Likert scale to determine cooking confidence.

Questions 6-9: Eating

Questions 6 – 9 examined the participants eating habits. Questions 6 and 7 asked for self-reported fruit and vegetable consumption. Question 8 asked about meals eaten which were cooked from basic ingredients. Question 9a asked about effort put into food preparation. Question 9b was an open ended question asking about perceptions of 'Healthy' food.

Questions 10-15: Growing

Questions 10 – 15 examined the participant's food growing activities, their confidence with regard to growing activities and sourcing of fruit and vegetables. Similar to questions 1-5 above, question 10 gave an option of 5 possible answers of current growing knowledge. Questions 11 – 14 used a Likert scale to determine confidence with growing. The final question asked about the effort made by an individual when selecting and/or sourcing fruit and vegetables.

3.2) Qualitative survey design

Questions were developed for this survey so that depth could be added to responses generated from the quantitative survey. Consultation took place between the various project stakeholders to ensure that these questions would complement the quantitative aspects appropriately and add further insight into the exploration of the required objectives. Open questions related to new skills gained specifically from growing, cooking and eating, as well as 'other' skills gained as a result of the project. A further open question asked participants how the project had changed their eating habits and if any other changes had taken place. Finally participants were asked what parts they enjoyed and didn't enjoy.

3.3) Process evaluation

This consisted of data collected by each of the project delivery partners/organisers. Data were collected on exactly what happened during each session of the project, where (venue), when, numbers attending, resources used, etc (see Appendix p.35).

3.4) Sampling

It was intended that all participants in each project group would complete the relevant data collection tools, facilitated by the relevant project leader.

3.5) Data analysis

All data were inputted into an Excel spreadsheet (Excel 2007) and basic frequencies and descriptive tests were carried out. As this was exploratory work and participant numbers were small, further statistical testing was not deemed appropriate, so statistical significance is not stated. Results are presented for all groups combined, showing quantitative directional differences between baseline and endpoint and qualitative comments. Thereafter, two individual case studies are presented to provide detail of specific findings of interest.

4.0) Results

Following coding and data input, the results from each project were initially aggregated into one data set to give an overall impression of the findings relating to socially based growing, cooking and eating activities.

4.1) Quantitative Survey Results

Out of the eight projects, two did not fully complete their surveys (see limitations section p.28). Of the six that managed to complete and return full data sets, 42 participants had full baseline and endpoint quantitative data.

4.1.1) Cooking

Table 3 shows differences between baseline and endpoint for the first cooking question. It can be noted that there was a 10% increase in participants preparing dishes from basic ingredients. The most marked difference was the 33% drop in cooking convenience foods and ready meals. There was also a small 3% decrease in participants reporting that they 'Don't cook at all'.

Table 3 Cooking Question 1 baseline and endpoint		
Question	Baseline (%)	Endpoint (%)
Prepare dishes from basic ingredients	60	70%
Put together ready-made ingredients to make a complete meal	42	30
Cooking convenience....	56	22
Don't cook at all	0	0

4.1.1.1) Cooking confidence

An increase in confidence from baseline to endpoint was reported for all questions relating to cooking. (see case studies for detail of this p 13).

4.1.2) Eating

With regard to question 6 and 7 participants gave responses that ranged between 0 and 6 portions of fruit and vegetables per day. Participants reported a mean increase of 0.31 portions of fruit and a mean increase of 0.3 portions of vegetables. This was more marked for specific projects (see case studies)

Question 8 showed an element of ambiguity so was removed from analysis (see limitations section).

Question 9a indicated overall that 'more effort and care was put into the food that I eat' after the intervention (see case studies for details).

Question 9b was open ended and question responses were grouped into themes. The number of responses under each theme at both baseline and end point can be seen in table 4 below.

Table 4 Responses to question 9b "What does Healthy food mean to you?"					
Themes	BL	EP	Themes	BL	EP
Not a lot/don't know/nothing	7	0	Not ready meals	1	4
Reference to fruit	6	13	Milk/cheese	4	3
Food that gives vitality/energy/health	10	5	Vitamins/nutrients/necessities	0	1
Balance/variety	4	10	Good ingredients	0	2
Not too much fats/sugars/dairy	3	3	Meat	0	4
5 a day	0	1	Fish	1	3
Control/healthy weight	2	2	Carbohydrates	0	2
Reference salad/vegetables	7	13	I don't like healthy food	2	0
Low fat	2	2	cooked from scratch/by me	0	6
Less/Lean meat	1	1	Look forward to/like cooking	0	1
Less taste	1	0	Controlling health condition	1	0
Fresh/natural/organic	4	7	No additives	1	0
Reasonable portion size	1	1	Less Salt	1	2

Food that's good for you/healthy	7	11	Watch traffic colour codes and labels	1	0
Feeling good	0	3	Reference cereals	0	2
Tasty	1	1	Food I trust	1	0

Some participant comments of interest are highlighted in grey. More participants referred to fruit and vegetables at the end of the project (approx. 50% increases for both). Similarly, there was a significant drop in the number of people stating they did not know about healthy food.

4.1.3) Growing

The results from question 10 – 15 are discussed below.

There was a positive increase in all forms growing activity between baseline and endpoint. Similarly, there was a marked decrease in the number of participants who did 'no growing at all' between baseline and endpoint. Notably there was a 15% increase at endpoint in the number of participants reporting that they 'grew small plants indoors'; there was a 17% increase in the numbers of participants reporting they 'grew a small amount plants outdoors' and; a 17% increase in the number of participants reporting that they engaged with growing in a larger growing area with a number of plants. Finally, participants reporting that they did no growing at all decreased by 36%.

An increase in confidence from baseline to endpoint was reported for all questions relating to growing (see case studies for detail).



Participants from Sovereign Housing in their new garden

4.2) Qualitative Results

The responses from all participants from all projects were coded and grouped together into themes.

4.2.1) New Growing, cooking and eating skills gained from project

The new food related skills participants might have acquired in relation to cooking, growing and eating as a result of participating in the project are shown in Table 5 below.

Table 5 New food related skills gained from project	
Themes	Number of responses
Cooking basic ingredients	15
Learnt new dishes (specific)	15
Learnt new dishes (non-specific)	13
Food Hygiene	8
Cooking Techniques (i.e. chopping)	22
H&S in the kitchen (knives)	1
Cook/prep new veg	8
Learnt about new plants/veg/herbs	22
Leant about basic growing skills (Developed growing skills)	22
Understanding of application of a variety ingredients (combining)	8
Learnt about healthy food/nutrition	16
Cooking is fun/delicious/enjoyable	2
Learnt about new meat/cuts	4
Learnt new skills (non-specific)	5
Local Produce/sourcing	5
Responsible Drinking	1
environmental awareness	1
Learnt about fish/fishing	4
Medicinal application of food	1
No learning	9
5-A-Day	2
Save money	2
Smaller Plate/Eating less/food portion	4
Eating new/different foods	9

Table 5 above clearly shows that a lot of new skills were gained from taking part in the projects. Certain areas of learning were particularly common and are worthy of note – these have been highlighted in grey. Cooking techniques – such as chopping techniques – were referred to by 22 participants. Learning about new plants, vegetables and herbs, was also referred to by 22 participants, as was Learning about basic growing skills.

A number of other types of food based learning and skill acquisition were also quite common. These are highlighted in grey above and include: Cooking from basic ingredients and learning new dishes – 15 responses each; learning about healthy food and nutrition – 16 responses.

4.2.2) Other skills acquired from the project

Other possible areas of skills development, the results are shown in table 6 below.

Table 6 Other skills gained from projects	
Themes	Number of responses
Gained confidence in cooking	11
Gained confidence with others/communication	6
Gained confidence General	15
Teamwork	27
Communication skills	3
Concentration skills	1
Listening skills	3
Commitment to course/programme/motivation	2
Confidence on water (career choices)	2
Timeliness	1
Social benefits/meeting new people/sharing interests	27
Open to, trying new opportunities	2
General skills	1
Confidence in growing	2
Self esteem	1
Self- directed learning	1
Lifestyle choices/alternative ways of living	3
Literacy/Numeracy	2
Maturity	1
Budgeting	1
Business Skills	2
Sense/part of community	1
Fun/enjoyment	5
Other Cultural skill (ie dance)	2

Table 6 demonstrates other areas of learning and skilled gained from participation in the projects. Some of more notable skills are highlighted in grey above, these include: 11 participants referred to experiencing a growth in confidence with regard to cooking; 15 participants referred to increase in general confidence levels. The idea of developing teamwork skills was one of the most commonly reported skills – referred to 27 times, as was the development of social skills. 27 participants made reference to gaining social benefits such as meeting new people and sharing interests.



Growing, cooking and eating at What’s Cooking Allotment

4.2.3) Change in food and eating habits

Examples of the self-reported qualitative comments on ‘change in eating habits’ as a result of the project can be seen in Table 7 below

Table 7 Change in food and eating habits	
Themes	Number of responses
Yes - a bit/general improvements of diet	7
Less fat/fatty food/salt&sugar	3
More healthy/fresh food	17
More veg/fruit	15
more varied/balanced diet	11
Smaller portions	6
Less junk/processed/ready meals	7
Better awareness/knowledge of nutrition	8
Don't binge eat	1
Didn't change much/No	15
Lost weight	1
Eating more	2
Positives of cooking with others	1
Food from other cultures	1
Change a lot	2
Want to doing more growing	1
More cooking	6

Eat more regularly	1
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Notable common themes emerging were that 17 participants reported an increase in their consumption of fresh and healthy food. 15 participants reported an increase in their consumption of vegetables and fruit. Eleven participants reported that they now experienced a more varied and balanced diet. 15 participants reported no change at all from participating in the project (see discussion p.24).

4.2.4) Other changes

Other changes participants may have experienced over the course of the project can be seen in Table 8 below.

Table 8 Other changes experienced by participants	
Themes	Number of responses
Cooking ability	5
Confidence/self esteem	6
Progression to training	3
Progression to other opportunities	5
Other health impacts	3
Inspired	1
Improved circumstances/opportunities/engagement	8
Improved social connections	17
Environmental/lifestyle awareness	4
No other change	11
More time/effort in to cooking fresh ingredients	2
Increase purchasing/improved knowledge source	5

In terms of other changes that the participants experienced from taking part in the project, it can be seen from table 8 above that a variety of changes were reported. Common themes included improved circumstance and engagement – referred to 8 times, as well as improved social connections– reported 17 times.

4.2.5) What participants enjoyed and did not enjoy

Participants reported a wide range of aspects they enjoyed about the projects (table 9). Notable common themes included “trips out”; enjoying learning about cooking, undertaking cooking activities and social aspects of eating. Many of the participants reported that they enjoyed all of the

activities. The comments relating to what they did not enjoy were general – most of them reported that they enjoyed the entire project and there was nothing they did not enjoy.

Table 9 Examples of what participants enjoyed and did not enjoy	
What participants enjoyed	What participants didn't enjoy
Trips out, e.g. butchery	Too much other activity (i.e. Dancing)
Cooking learning eating	Missing some of the course
Recipes info to take away	End of course/want more
Learning	Some foods
Gaining confidence	Weather
Working with others/social aspect	Filling in forms
Trying new things/food	Confidence building workshop
Everything all of it	Nothing they did not enjoy/enjoyed it all

5.0) Case Studies

Devonport Life House

Summary: The project aimed to improve the eating habits of group young men within a residential hostel setting. Objectives included: working with professional chef and social care professional to learn new cooking skills within the centres kitchen facilities; growing herbs and vegetables in a small allotment area within the grounds of the centre; a variety of day trips and visits related to food growing establishment and outlets; and collective eating experiences where the participant cooking meals for other residents and external visitors.

There were also expert sessions around food hygiene and confidence building nutrition. Over the course of four months there were a total of 77 sessions that varied in length from whole days to quick one hour slots.

Participants: Seven young men, drawn from the Plymouth area, living at Devonport House – Life House Hostel - took part in the project, all of whom were between 18 and 25. Devonport Life House is Salvation Army hostel offering young men emergency residential accommodation. All of the residents were considered to have multiple and complex needs.



Cooking workshop at Devonport House

The project was designed by the participants and their key worker at hostel. In addition to providing training input from a professional chef, the participants also engaged in wider activities aimed as much at their own personal and professional development. Many of the participants had experienced drug and alcohol problems, as well as issue relating to mental health. They had become residents at the hostel due to becoming homeless or being at risk of becoming homeless.

The key worker had a well-developed relationship with the participants where it was felt that any change in eating habits would need to be accompanied with wider lifestyle changes. Subsequently the project contained elements of professional training to supported employability e.g. the participants undertook their Food Hygiene Certificate. They also participated in confidence building sessions.

Quantitative Outcomes: Some key changes observed were in question 1 where there was an increase from 43% at baseline to 86% at endpoint in participants reporting that they “Prepare dishes from basic ingredients”. There was also a marked decrease in participants stating they “Cook convenience foods and ready-meals” from 86% at baseline to 0% at endpoint.

With regard to question 2 – 5 on cooking confidence, there was an increase in confidence on all questions between baseline and endpoint. For question 2 ‘cooking meal from basic ingredients’ 42% of participants gave a “confident” response at baseline, then at endpoint 100% gave a “confident” response. For question 3 ‘following a simple recipe’ 71% of participants gave a “confident” response at baseline and this was 100% at endpoint. For question 4 ‘tasting foods that they had not eaten before’ 85% of participants gave a “confident” response at baseline and 100% at endpoint. For question 5 ‘preparing and cooking new foods and recipes’ moved from 58% at baseline to 85% at endpoint. This shows a positive shift in ‘direction of travel’ or responses, which demonstrates increase in confidence in all areas of cooking skills.

With regard to eating questions there was an increase in the mean portions of fruit and vegetable eaten daily. For fruit consumption (question 6), portions increased from 0.8 at baseline to 2 portions at endpoint. For vegetable consumption (question 7) portions increased from 0.7 at baseline to 1.4 at endpoint, both suggesting an improvement in healthy eating.

For question 9a, relating to ‘putting care and effort into food’, again a positive shift was observed. At baseline 43% ‘strongly agreed’ with this statement and at end point this number had increased to 86%.

The open ended question 9b which asked ‘What does healthy food mean to you’, before and after statements seemed to suggest that the participants had a reasonable knowledge of what healthy

food was, both prior to and after the project. A typical set of responses from one participant can be seen below:

Baseline: *“Not a lot to be honest, I eat mostly anything.”* Endpoint: *“yeah, like bananas and oranges.”*

Many showed some understanding at baseline, an example being Baseline: *“Vegetables, hardly any meat or taste, no cakes, sweet things etc.”* Endpoint: *“Fresh, local ingredients and fruit included in meals, reasonable portions sizes.”*

With regard to the growing question the following was reported. For question 10, (where participants could tick as many answers that applied) ‘What kind of growing do you do at the moment?’, at baseline 29% reported ‘growing small plants indoors’, 14% growing small plants outdoors’, 0% ‘share/own a larger growing area with a number of plants’, 71% ‘no growing at all’. At endpoint this had moved to 43% reported ‘growing small plants indoors’, 43% growing small plants outdoors’, 29% ‘share/own a larger growing area with a number of plants’, 29% ‘no growing at all’. This showed a positive up shift in food growing.

With regard to question 11-14 on growing confidence, there was an increase in confidence on all questions between baseline and endpoint. For question 12 ‘maintaining a small indoor plant’ 85% of participants gave a “confident” response at baseline, then at endpoint 100% gave a “confident” response. For question 13 ‘growing a small indoor plant from seed’ 57% of participants gave a “confident” response at baseline and this was 85% at endpoint. For question 14 ‘maintaining a vegetable garden with a number of plants’ 57% of participants gave a “confident” response at baseline and 85% at endpoint. For question 15, when asked to comment on whether or not they agreed with the following statement ‘I put effort into selecting/sourcing fruit and vegetables’ 57% agreed at baseline, this moved to 85%

at endpoint. This shows a positive shift in ‘direction of travel’ or responses, which demonstrates increase in confidence in all areas of growing skills.

Qualitative Outcomes: A broad variety of responses were given to the six open end question as part of the qualitative research undertaken at the end of the project. Below is a



Sprouting vegetables at Devonport House

list of typical quotes from a variety of participants in response to the six questions.

Question 1 (cooking skills):

"The food hygiene course taught me a lot about food poisoning and how to cook safely. I've learnt how to chop food up correctly and safely without chopping half my fingers off"

"Being able to cook from ingredients that I would of never attempted to cook. My knife skills have improved...it does help."

Question 2 (other skills):

"Team work, cooking with new ingredients."

"Confidence and team work, and listening to others. Commitment to the course"

Question 3 (changes in eating):

"Eating a lot more vegetables and lots of different dishes."

"I don't binge eat like that no more and i understand food a bit more now."

Question 4 (wider changes):

"More confident around others and working in a team and completed NVQ level 1 in food catering."

"I have applied to City College to do NVQ 2 in catering. I have moved back into the main hostel at Devonport house"

Question 5 (what they enjoyed):

"Everything."

"I enjoy catering for others, like other in the house."

Question 6 (what they did not enjoy):

"Washing the dishes."

"Nothing significant."

Greenbank Young Men's Project

The project aimed to improve the eating habits of a self-selecting peer group of young people. The objectives were to achieve this through a series of food related day trips and visits that would both broaden their horizons and inform and inspire them into buying and home cooking food. The further objective to teach them to cook the food they liked, by working with a young and successful local chef who had the potential to develop a good rapport with the participants.

The young people met within their own dedicated space, a community building with a wider social housing estate, every Tuesday where they were supported by a Plymouth Youth Service worker.

Each session varied in length

depending on the activity. Most weekly cooking sessions ranged between an hour to two and a half hours. Where trips out were planned, these were often half days (to an abattoir an organic farm and retail business), there was a longer day trip to go sea fishing, followed by cooking by BBQing. There were a total of 19 contact sessions with the young people for 19 consecutive weeks.



Cleaning fresh fish at Greenbank Youth Project

Participants: Working in partnership with Plymouth Youth Service, the project was based around a specific peer group of nine young men with complex needs. Supported by a dedicated youth worker all the participants had experienced chaotic family circumstance. All the young people were between 16 and 19 and came from the Greenbank, Lipson and Efford area of the city. While most of the young people were able to attend most sessions, many of the young people were involved with various different stages of the criminal justice system.

One of the key aspects of the project was that it was led by the young people and centred on their interests and needs. Prior to beginning the project, the group had been meeting with the youth worker for some time, they were all considered to be NEET (Not in Education, Employment or Training) and 'hard to reach' with multiple and complex needs.



BBQing at Greenbank Youth Project

Having met regularly for some weeks it became apparent to the youth worker that the young people, due to their chaotic or absent family lives, were not eating healthily or not eating at all. The youth worker arranged for some basic cooking facilities at the community building and the young people began to undertake cooking basic meals for themselves. This was food such as cooking brunch and bacon sandwiches. At this point the opportunity to take part in the Food Culture programme was presented and the young people were enthusiastic about learning to cook a wider range to meals and subsequently had strong engagement with the programme. This provided perhaps an unexpected outcome for the Youth Service staff as the young people were considered to be a challenging group and traditionally hard to engage with.

Quantitative Outcomes: Some key changes observed were in question 1 where there was an increase from 50% at baseline to 87.5% at endpoint in participants reporting that they “Prepare dishes from basic ingredients”. There was also a marked decrease in participants stating they “Cook convenience foods and ready-meals” from 75% at baseline to 0% at endpoint.

With regard to question 2 – 5 on cooking confidence, there was an increase in confidence on all questions between baseline and endpoint. For question 2 ‘cooking meal from basic ingredients’ 25%

of participants gave a “confident” response at baseline, then at endpoint 75% gave a “confident” response. For question 3 ‘following a simple recipe’ 37.5% of participants gave a “confident” response at baseline and this was 75% at endpoint. For question 4 ‘tasting foods that they had not eaten before’ 37.5% of participants gave a “confident” response at baseline and 87.5% at endpoint. For question 5 ‘preparing and cooking new foods and recipes’ moved from 12.5% at baseline to 87.5% at endpoint. This shows a positive shift in ‘direction of travel’ or responses, which demonstrates increase in confidence in all areas of cooking skills.

With regard to eating questions there was an increase in the mean portions of fruit and vegetable eaten daily. For fruit consumption (question 6), portions increased from 1 at baseline to 1.93 portions at endpoint. For vegetable consumption (question 7), portions increased from 0.4 at baseline to 2.6 at endpoint, both suggesting an improvement in healthy eating.

For Question 9a and observable positive shifted was reported. With regard to the participants ‘enjoying putting effort and care’ into food, at baseline 14% agreed or strongly agreed with this statement and this increased to 86% at endpoint.

The other notable area of interest here was question 9b, which was open ended and asked the participants what ‘health food meant to them’. Before and after statements seemed to suggest that the participants had a reasonable knowledge of what healthy food was, both prior to and after the project. A typical set of responses from one participant could be:

Baseline: *“It means salad and food I do not like such as fruit and veg.”* Endpoint: *“Fresh food and meals from scratch.”*

A further quote, suggesting a great change could be: Baseline: *“Means nothing to me.”* Endpoint: *“Food that is good for my body and mind. Wholesome food which I have cooked from scratch.”*

The Greenbank project did not have a growing element to it. While the participants did complete the questions, predictably no discernible change was shown (see limitations section p.28).

Qualitative Outcomes: A broad variety of responses were given to the six open end question as part of the qualitative research undertaken at the end of the project. Below is a list of typical quotes from a variety of participants in response to the six questions.

Question 1 (cooking skills): *“Cooking chicken, chicken korma and food from basic ingredients. Cutting skills – cutting up chicken”*

“I learnt basic cooking skills. How to prepare food and use ingredients, herbs and spices.”

Question 2 (other skills): *“Gained confidence and self-esteem.”*

“I gained confidence in being able to cook meals from scratch for my girlfriend and daughter. In particular chicken and bacon pasta bake.”

Question 3 (changes in eating): *“Yes. I cook using more basic ingredients. I think about what I cook and eat.”*

“It has made me eat a little healthier.”

Question 4 (wider changes): *“Family relationship is more positive. I am now working and I love my girlfriend and daughter very much.”*

“My attitude towards cooking in general.”

Question 5 (what they enjoyed): *“Fishing trip, learning from the chef, cooking from scratch.”*

“I enjoyed learning to cook from basic ingredients and getting to eat various meals.”

Question 6 (what they did not enjoy): *“None, I enjoyed all of the project.”*

Some of the observations given by the youth workers, as part of the process evaluation (see p.39) also have relevance here. Under the heading: ‘Content- what worked well?’ the worker commented:

“[name of participant] was up out of bed and ready and waiting at 8.30am to go to the [food hygiene] course. Harry learnt a lot and stayed throughout the day.”

This is an example of change in attitude. The young person in question would not normally get up early - which is why sessions were always scheduled for the afternoon. It showed that the young person showed increased motivation and a want to achieve a qualification to improve his knowledge of food hygiene and career prospects. This is an example about how the project approach was effective in engaging and enthusing participants.

6.0) Discussion

The overall aim of the project was to provide sustainable food activities to improve health outcomes for young adults and older people in priority areas of Plymouth. This exploratory research shows how food education programmes, using growing, cooking and eating activities, delivered in an enjoyable way, with an emphasis on social interaction, can influence food practices and promote behaviour change. Eight projects were funded that provided elements of growing, cooking and

eating to groups of young males and/or older adults (see table 1). Overall this project demonstrated positive outcomes and thus can be deemed as being successful. The development and implementation of simple but consistently delivered evaluation measurement tools serve to confirm this.

In summary results showed that participants (n=42) reported increases in all food growing activities, particularly with a 36% decrease in 'not doing any growing at all'. There was an increase (10%) in meals cooked 'from scratch' and 34% decrease in convenience food consumption. Confidence in growing and cooking activities increased for all participants. There was mean (portion) increase in fruit (0.31) and vegetable (0.3) consumption. Skills gained from participation included chopping vegetables, cooking, healthy eating; teamwork and self-esteem. Change was reported for healthy eating awareness and social connections. Participants enjoyed the innovative approach, e.g. trips out and social aspect. The case studies demonstrate some of these results in more detail.

The project set out to:

1. Realise food related behaviour change in participant groups
2. Capture research intelligence by developing methods for measuring relevant outcomes
3. Embed models to ensure the sustainability of the various activities
4. Inform policy and working practice between the Health, Adult Social Care, Youth, Academic and the Civic Sector.

Each of these points will be now be discussed:

6.1) Realisation of (growing, cooking, eating related) behaviour change in participant groups

Key themes emerging from participants included improved cooking and growing confidence and enhanced food skills overall. Confidence and self-efficacy is a known precursor to positive behaviour change (NICE 2007). This fits well with government strategies to improve cooking skills in young people (DCSF 2008). It also confirms recent work that has suggested growing food provides an aesthetic experience, which potentially affects the way communities think about food, the environment and health (Hale et al 2011).

In terms of actual eating practices, in the UK there is a recognised heavy reliance on convenience foods (Pettinger et al 2006) so any reduction in consuming such processed foods in favour of increases in 'cooking from scratch' can be seen as a positive shift. Similarly any improvement in consumption of fruit and vegetables must be seen as a positive outcome (WHO, 2003). Growing activities have been shown to increase preferences and improve dietary intake of fruit and

vegetables (Robinson-O'Brien et al, 2009). This is promising, given the fact that estimated levels of 'healthy eating' are worse in Plymouth than the England average (DH, 2011).

There seemed to be a reasonable knowledge and improved awareness around healthy eating, particularly in the youth groups. This is an interesting finding, as males are known to be reluctant to change their diets for health reasons (Gough & Conner, 2006). Taste preferences for fast food and lack of availability of healthy foods are reported as being amongst some of the drivers for poor eating habits in young people (Shepherd et al, 2005). Important lessons can be learnt from this: recent research has shown healthy eating messages need to become more accessible for young people, but also that interventions need to account for such core emotional needs as identity and belonging (Stead et al 2011): these needs are particularly influential for young adults. These positive behavioural shifts caused by these projects, coupled with the favourable qualitative comments about how much they enjoyed the project, indicate the effectiveness of these innovative and socially orientated projects.

It was of interest that the older groups were ambivalent when it came to completing their evaluation forms (see limitations section), and that they also reported minimal change as a result of their participation in the projects. Previous exploratory qualitative work with older people in North Devon demonstrated that this age group lament the fact that many young people today do not know how to cook (Pettinger & Lankshear, 2008) Recommendations might be, therefore, to better engage the older people by capturing their enthusiasm more around food and cooking (and growing) in order to engage younger generations (e.g. inter-generational cooking projects), thus improving community engagement (Russell, 2008) and cohesion (DfCLG, 2007). Also with older adults, they might be better suited to be trained as peer support workers (Hyland et al, 2006). This may provide more powerful cultural credible 'messenger' for this age group.

More general findings related to improvements in social confidence, teamwork and self-esteem. This ties in well with the evidence that community interventions designed with behaviour change concepts in mind can encourage resilience by promoting positive social networks (COI, 2009). This suggests the potential of improving confidence, self-efficacy and self-esteem, by using more 'ecological' approaches - i.e. engaging with social and physical environments as well as individual behaviours, attitudes and knowledge (COI 2009) – for many more health improvement projects. This would encapsulate some of the principles behind the asset-based (community development) approach (IDEA, 2010), which has at its heart the promotion of community networks, relationships and friendships that can provide caring, mutual help and empowerment (IDEA 2010).

6.2) Capture research intelligence by developing methods for measuring relevant outcomes

This work has captured interesting themes and aspects of food related behaviours. Evaluation is a vital part of any health promotion to place a value or to quantify the worth of the activity (Thorogood and Coombes, 2006). Evaluation of food projects is known to be particularly challenging and there is often confusion about how to evaluate and what resources to use (McGlone et al, 2005). For the sake of this project, a lot of effort was put into planning resources and the development of the measurement tools took account of validated methods that serve to enhance overall robustness of the method (see methodology section). The final product was simple, concise and easy to complete. Behaviour change aspects were firmly but simply embedded (via confidence questions). Despite this, as with all research, there are methodological limitations (see section below) and interpretation of the results must be carried out with some caution.

The research tools used have the potential to become standardised methods for evaluating local food projects which include elements of food-growing, cooking and eating. Future work should consider how to further validate the data collection tools used. Although aspects had already been validated, namely cooking (Barton et al, 2011) and eating (CLES 2010), the growing/sourcing element, which had no validated methods associated with it, needs further development to ensure it is robust. The tool overall should be used with more “food groups” and be further assessed for validity and reliability.

6.3) Embed models to ensure the sustainability of the various activities (social enterprises?)

There are many factors that can affect the sustainability of food projects. Although this goes beyond the remit of this research report, it is an important consideration for the future of this work. Critical factors reported in the past have been: funding and community support; structure and management, and ownership of the project (McGlone et al 1999). All of these factors were considered when the project was set up in the first place and feed into the section below on partnership working.

Community food projects are an important way of tackling health inequalities and poor food access. They are often under-funded, but are expected to meet important government health targets, and have been identified as one of the main mechanisms for improving access to fruit and vegetables in the Government's public health strategy. Creating social enterprises out of some food projects may lead to better sustainability of such projects (Sustain 2005); however, perennial challenges arise. There are critical resourcing issues. From an anecdotal perspective, it can be observed that true social enterprise models, wholly independent from and non-reliant upon public funding, must maximise economic and social return and minimise overhead costs. This means that potentially time

consuming reporting, evaluation and research activities are often not affordable. Mixed economy social enterprise ventures, where there is an element of public subsidy often experience similar challenges, in that with public funding comes an additional 'accountability burden', an added need to report and a more democratised, and therefore more complex, decision making model. Such issues can reduce efficiency, undermine business models and longer term viability. Despite this, given the current restructuring of various key public services, there will be more emphasis on innovative ways of working with lower budgets, so awareness and understanding of the potential challenges should be considered.

6.4) Inform policy and working practice between the Health, Adult Social Care, Youth, Academic and Civic Sectors.

At a time of radical change within the health (and other) service(s), the wider processes involved in partnership working with the various organisations was of particular interest during this project. The steering group consisted of individuals from public health, social care, youth, statutory, civic sectors and the emerging social enterprise sector. This meant that the steering group had to accommodate and work across a broad diversity of organisational structures and cultures. On the one hand: large accountable public bodies, on the other: independent social enterprise businesses. From observations, this highlighted a 'risk/regulation paradox'; while there was a desire to innovate, this required a higher level of risk taking, something which social enterprise has a greater appetite for. Risk taking in highly regulated, accountable public bodies is hard, where there is often a culture of risk aversion. While this was a point of tension during this pilot partnership approach, the project was successful and this serves to highlight the importance of public/civic sector partnerships, which can show innovation and subsequently manage the different challenges, as well as undertake a great variety of activities under a variety of conditions.

Despite the many challenges involved, working in such a manner across different sectors shows great promise, and the lessons learnt can be built on. This project can inform future commissioning policy for all the sectors involved. Food is essential for all and by its very nature it crosses boundaries and disciplines - so development of good partnerships in this field is vital. The Plymouth Food Charter is an excellent example of partnership working in action (www.foodplymouth.org), and the Food Cultures project captures the philosophy of this approach. Partnership development and maintenance are important aspects of Public Health Nutrition practice and capacity building strategies which support interventions (Hughes & Margetts 2011). Successful partnership working requires clear identifiable purpose(s), and careful planning and monitoring. At least one effective

partnership analysis tool has been developed (McLeod 2003) so perhaps future work should consider using such a tool to monitor progress and provide a focus for discussion between organisations.

7.0) Limitations

All research is prone to limitations and this work is no exception.

Quantitative: For the questions on 'growing', there were no validated questions available for use, making the results open to cautious interpretation, (recommendations are made above). Similarly, as some of the projects did not contain all three aspects of 'growing, cooking and eating', some of the data is missing. There should have been more robust emphasis on the criteria by which to assess the initial projects submitted, which might have alleviated this limitation. This links to the points raised above about the cultural differences seen between organisations involved, each demonstrating conflicting pressures and constraints. Overall more thorough validation of these methods is warranted.

Qualitative: Although described as qualitative methodology, this self-completion semi structured survey approach may be subject to bias due to the addition of 'prompts' in the questions resulting in leading the participants' responses. Interviews may have been more appropriate manner to collect this data, which would provide more scope for 'probing' for further detail (Hancock et al, 2009). If this work is to be developed, then individual interviews and/or focus groups may be a more appropriate method to further explore some of the key themes that have been highlighted.

Completion of data surveys: While it was the intention for all participants to complete surveys before and after the food projects, two of the projects, Wellcome Hall and Sovereign Housing, did not do this. This was possibly due to the nature of their participants (later life groups – generally less willing/able/accustomed to filling out data collection forms) and the context of their delivery (a residential care setting and lunch club, therefore a more dynamic participant group subject to greater change). Some suggestions on how to better engage the older groups is provided above.

Sampling: The small numbers of participants in each project make it difficult to carry out more powerful statistical tests to show significance of the results. For a similar reason, the sample cannot be seen as representative. Future work should consider larger samples so that more meaningful statistical methods can be employed

Despite the limitations outlined above, the findings of this exploratory evaluation work provide very useful insight into the behaviours and experiences of the participants in the groups in question, all of which contribute to the overall evaluation of the Food Cultures project by making specific recommendations relating to these often hard to reach groups. Some of these findings are of particular interest and warrant further investigation.

8.0) Recommendations

1) Continue to fund and run small scale food projects which incorporate elements of growing, cooking and eating, develop evaluation tool further in order to validate and adopt as a standardised food project evaluation tool across Plymouth (and beyond). This could be promoted via the Food Plymouth network (www.foodplymouth.org).

2) Maintain innovative approaches: actual projects should continue to include an aspect of social interaction for participants. This is true for all the population groups considered here, albeit utilising different forms of social interaction (e.g. the value of inter-generational work for older people). The research points to the importance of social circumstance and the key influence of social and cultural norms upon individual behaviour. Further areas of enquiry are therefore recommended into 'group solutions' to health improvement. Further enquiry should investigate how the intrinsically 'social' aspect of social enterprise activity can help produce great health outcomes and to what extent the commissioning of group activities - as opposed to individual interventions - can further manage down costs.

3) To continue to include 'hard to reach' groups as the focus of further work around food practices; to build on confidence and self-esteem findings and consider incorporating 'environmental' aspects to improve the quality of research. From an organisational perspective, develop further methods for assessing and monitoring partnership working across the different sectors.

4) The sustainability of such food related projects is dependent on funding. This can be achieved either public commissioning, in which case the cost and benefits of preventative inventions and group approaches versus the cost and benefits of reactive healthcare provision and individual treatments need to be better understood and more widely shared. Sustainability can also be developed and improved through social enterprise approaches. Income generating and mixed economy approaches, utilising increasingly 'stripped-down' business models, where overheads are reduced, can produce greater health outcomes for participants at lower costs.

Evolving model around social finance and investment are also worthy of consideration. These new financial products such as Social Impact Bonds (SIBs) can be effective when working with tangible outcomes that can be clearly costed. These funding instruments are becoming increasingly common within the social enterprise sector, particularly at the interface with healthcare and the criminal justice sector (www.bigsocietycapital.com ; www.socialfinance.org.uk)

9.0) Conclusions

With the current public health transition and other political and structural changes, we are seeing great change including the creation of Health and Wellbeing boards to oversee public health and health improvement priorities and the movement of some commissioning functions from the NHS to local authority (Campbell, 2012). There will be many more changes to come that will influence the way that services are delivered and commissioned. This report is timely in that it captures positive outcomes for activities in food growing, cooking and eating practices that can serve as evidence to inform future food and health policies that address health improvement and reduce health inequalities. It also highlights the necessity to focus on the development of strong partnerships between organisations, particularly the rapidly evolving social enterprise sector.

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Appendix

Baseline quantitative data collection survey: growing, cooking, eating

To be completed by all participants during the first session and repeated at the closing session of the activity

*NB: where the project does not have either a growing/cooking/eating element the **practitioner** can choose to mark some question as not applicable, please agree this with project managers*

COOKING

1. What kind of cooking do you do at the moment? (tick all those that apply)
 - a. Cook convenience foods and ready-meals
 - b. Put together ready-made ingredients to make complete meal (e.g. ready-made sauces)
 - c. Prepare dishes from basic ingredients
 - d. Don't cook at all
 - e. Other – please specify:

.....

.....

.....

2. How confident do you feel about being able to cook from basic ingredients?

Extremely confident 1 2 3 4 5 6 Not at all confident

3. How confident do you feel about following a simple recipe?

Extremely confident 1 2 3 4 5 6 Not at all confident

4. How confident do you feel about tasting foods that you have not eaten before?

Extremely confident 1 2 3 4 5 6 Not at all confident

5. How confident do you feel about preparing and cooking new foods and recipes?

Extremely confident 1 2 3 4 5 6 Not at all confident

EATING

6. On average, how many portions of FRUIT do you eat a day? (examples include a handful of grapes, an orange, apple or banana, a glass of fruit juice, or a handful of dried fruit)

_____per day on average

7. On average, how many portions of VEGETABLES do you eat a day? (one portion is a side salad, or 3 heaped tablespoons of vegetables, beans or pulses either raw, cooked, frozen or tinned. Please do not include potatoes)

_____per day on average

8. In a normal week, how often do you eat a meal that has been prepared/cooked from basic ingredients, either by yourself or someone else?

- a. never
- b. less than once a week
- c. once a week
- d. 2-3times a week
- e. 4-6times a week
- f. daily

9. Please indicate how much you agree or disagree with the following statements (circle one number for each statement)

a. I enjoy putting effort and care into the food that I eat

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

b. What does 'healthy' food mean to you?

.....
.....
.....

GROWING

10. What kind of food growing do you do at the moment? (tick all those that apply)

- a. Grow small plants indoors
- b. Grow a small amount plants outdoors (in window boxes/tubs etc)
- c. Share/own a larger growing area with a number of plants
- d. No food growing at all
- e. Other – please specify

11. How confident do you feel about maintaining a small indoor plant(s) i.e. herbs?

Extremely confident 1 2 3 4 5 6 Not at all confident

12. How confident do you feel about growing a small indoor plant from seed?

Extremely confident 1 2 3 4 5 6 Not at all confident

13. How confident do you feel about maintaining a vegetable garden with a number of plants?

Extremely confident 1 2 3 4 5 6 Not at all confident.

14. How confident do you feel about identifying a number of different vegetables and fruit?

Extremely confident 1 2 3 4 5 6 Not at all confident

15. Please indicate how much you agree or disagree with the following statements
(circle one number for each statement)

a. I put effort into selecting/sourcing fruit and vegetables.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

Summative qualitative data collection survey: **growing, cooking, eating**

To be completed by all participants at the closing session of the activity

- 1) Thinking about growing, cooking and eating; what new skills have you gained/learnt from the project? Please list as many as you can. (Examples could be – cooking: chopping food, cooking techniques, combining ingredients etc – growing: preparing soil, germinating seeds, planting – eating: different food groups, different serving cutlery or crockery.)

- 2) Thinking about the wider project; what other new skills have you gained/learnt from the project? Please list as many as you can. (This could be things like confidence, team work, business skills, numeracy) etc

- 3) How has the project effected/changed your eating habits?

4) What else has changed for you during the project?

5) What parts of the project did you enjoy?

6) What parts of the project did you **not** enjoy?

Facilitator(s) Sessional Evaluation

Group name/course title:

Facilitator(s):

Session Title/Number:

Date and time:

Session Number:

Names & Numbers attending:

Facilitator's perception of the session (general overview):

Were aims met?

Content

What worked well?

What didn't work well?

Group dynamics (what's happening with the group, level of individual participation, any observed comments, discussion points raised etc)

Recommendations for future sessions