

# Margi Lennartsson

## Growing Health

## Garden Organic



### Which tool to use?

A guide for evaluating health and wellbeing outcomes for community growing programmes



Communities Living Sustainably



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# Why isn't food growing commissioned?

## NHS & Public Health

- Lack of awareness of the benefits of food growing and how to use it in practice
- Unsettled times and new structures
- Need evidence of outcomes and impact

## Food Growing Groups

- Don't have the contacts or awareness of routes to commissioning
- Not always set up to make commissioning easy – define the service, work in partnership and provide evidence of outcomes and impact



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# Benefits for health and wellbeing – the evidence



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## The benefits of gardening and food growing for health and wellbeing

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### Gardening and food growing for healthy weight

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

- Fruit and vegetable consumption, Nelson et al., 2007; Adams et al., 2008; Nelson et al., 2011
- Physical activity Hawking et al., 2013; Park et al., 2008
- Body mass index Cook 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 olds. 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 various ill-health problems, overweight can reduce people's prospects in life affecting self-esteem and mental health (Department of Health, 2011).

Excess weight gain in 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 a diet that includes:

- Fruit and vegetables each foods higher in fat and calories
- Enjoyable physical activities

Engagement in gardening or other leisure activities can address both of these issues as gardening is indeed recognised as enjoyable physical activity that to undertake 30 minutes of 5 more days of the week (NICE, 2010).

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

**i) Fruit and vegetable 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; Drapeau and Freshman, 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, eat, a greater variety of vegetables than those in the control group (Hartley et al., 2011). Lindenberg and Caputo (2005), 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 programme. 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 less or more portions of fruit and vegetables increased by 28% (Orma et al., 2011). Nelson et al. (2011) reported details of a number of studies demonstrating that pupil engagement in food growing activities resulted in increased consumption of vegetables, but also noted that most of the studies only considered whether pupil 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, Allender et al. (2008) reported that household members

## Gardening and growing for people with dementia

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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 senses or wellbeing, cognitive abilities, communication and engagement. Dewhirst 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 estimates 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 that will grow to £27 billion by 2018 (Kane and Cook 2013). The Alzheimer's Society notes that the Welsh Assembly in its framework action programme that low level support services such as gardening clubs are vital, and reduce the need for more intensive 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 minimise 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 care satisfaction, possibly reducing costs of long term, assisted living and dementia unit residents (Dewhirst et al., 2012; Gillin et al., 2012).

Stylianou garden sowing group photo

## Which tool to use?

A guide for evaluating health and wellbeing outcomes for community growing programmes

**Growing Health**

# Which tool to use?

A guide for evaluating health and wellbeing outcomes for community growing projects

## Aim

- Highlight the most commonly used tools
- Guidance on appropriate tools for different situations

## Tools for different nature-based interventions

- Green care
- Nature-based health promotion



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# Which tool to use?

- A. Case study reports
- B. Outcomes Star™
- C. Goal Attainment Scaling (GAS)
- D. Leuven Wellbeing & Involvement Scale
- E. Warwick & Edinburgh Mental Well-Being Scale (WEMWBS/SWEMWBS)
- F. Office of National Statistics Subjective wellbeing Questions (ONS4)
- G. Big Lottery Wellbeing Programme Evaluation Tools
- H. Bespoke questionnaires
- I. Economic Benefit Analysis
- J. Social Return on Investment (SROI)



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# Why do you want to measure health and wellbeing outcomes?

- Better understand impact of the project
- Promote the service among service users and funders
- Measure changes over time
- Inform development and improvements to the service
- Demonstrate results against key performance indicators

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# Nesta Standards of Evidence

## What is expected

## How the evidence can be generated

### Level 5

You have manuals, systems and procedures to ensure consistent replication and positive impact

Multiple replications of evaluations , future scenario analysis

### Level 4

You have one or more independent replication evaluations that confirm these conclusions

Robust independent evaluation that validate the outcomes of the service; external endorsement ;documented standardization of delivery, data on costs

### Level 3

You can demonstrate causality using a control or comparison group

Robust methods using control or comparison groups to isolate the impact of the service; Random selection of participants, large samples

### Level 2

You capture data that shows positive change, but you cannot confirm you caused this

Data can show effect but will not evidence direct causality. Use pre- and post survey evaluation; cohort/ panel study, r regular interval surveying

### Level 1

You can describe what you do, why it matters logically, coherently and convincingly

Draw upon existing data and research from other sources

# Measuring change – at what level?

- Individual
- Population of beneficiaries

# What are the intended outcomes?

- Person-centred outcomes
- Wellbeing and happiness
- Behaviours contributing to health and wellbeing
- Wider social and environmental outcomes
- Economic outcomes



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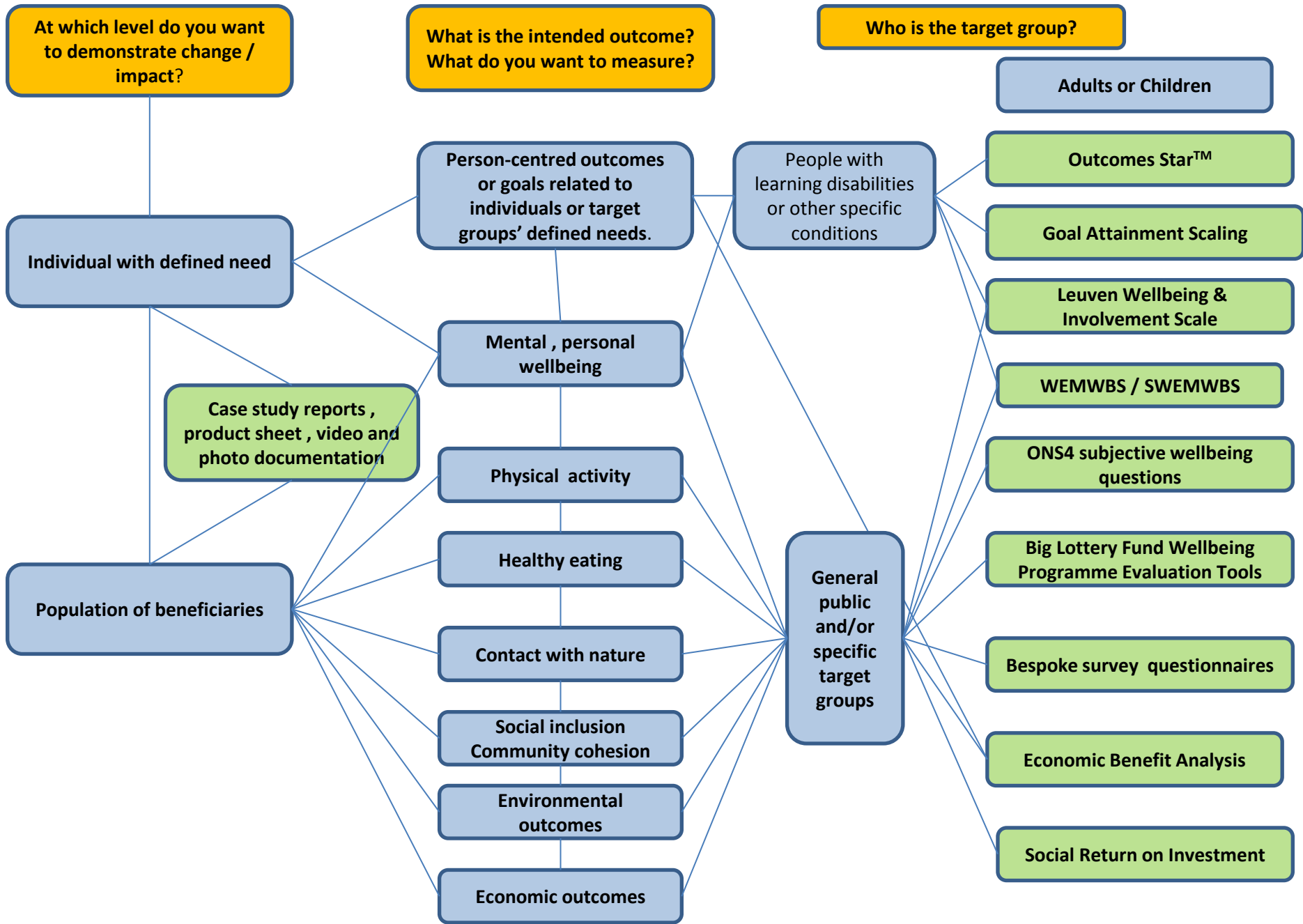


# Who are the service users / beneficiaries?

- Age group
- Level of literacy and IT skills
- Language
- People with specific needs (eg learning disabilities, dementia)

## Resources available for evaluation

- Human resources; time and skills
- External evaluators
- Planning, data collection, analysing and interpreting results



# Further information

- What Works Wellbeing

[www.whatworkswellbeing.org](http://www.whatworkswellbeing.org)

- New Economics Foundation

[www.neweconomicsfoundation.org](http://www.neweconomicsfoundation.org)

- Growing Health

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# Thank you

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