INQUIRY INTO CHILDHOOD OVERWEIGHT AND OBESITY

Organisation: Stephanie Alexander Kitchen Garden Foundation
Date received: 27 July 2016
For many years Stephanie Alexander, cook, writer and food lover, observed the growing trend in obesity among the Australian population, and in particular in children. Like so many others she despaired at the seemingly unstoppable force that was driving our children to make poor food choices.

She believed that this trend was evidence that current, traditional methods of food education were not working.

When reflecting on her own life experiences she believed that a pleasurable exposure to the growing, cooking and eating of fresh seasonal food, from a young age, would form positive food habits for life.

Understanding the time-poor world that families now live in, Stephanie believed the best way to introduce pleasurable food education to children would be in the primary school setting.

Working in this very structured environment with a captive audience, communities had the opportunity to create an incremental learning program that would give children exposure to the joy of growing, harvesting, preparing and sharing their own fresh food regularly, as part of their everyday experience.

This hands-on learning is designed to fully engage the curiosity, senses and enthusiasm of the children as they discover their own learning potential for themselves, driven by the self-esteem and pride that comes from creating beautiful food that is then shared with their peers. Working with the Collingwood College school community in 2001, the Stephanie Alexander Kitchen Garden Program was born.

In addition to gaining knowledge of the food production cycle, gaining skills in growing food and cooking, and the social aspect of sharing a meal, the program also facilitates the integration of mathematics, literacy, history, science, language, art, sustainability and more into kitchen and garden activities, and also back into the classroom setting. Using the key life experience of food, children gain a very practical, real-life platform to use their traditional academic learning to achieve Australian Curriculum outcomes.

This integrated nature of pleasurable food education is key to its sustainability in the primary school setting, and provides engaged and enthusiastic learners who can embrace their learning goals around the pleasure and knowledge of food.

We have learnt that this holistic approach – with addressing obesity as its core focus – brings many other benefits to the school community, which ultimately gives this program a far greater chance of sustainable success through multiple beneficiaries.

We believe that integrated pleasurable food education should be accessible to every Australian school with a primary curriculum. We believe that this can change the way Australians, for generations to come, make decisions about the food they choose to eat.
‘This year of 2015 is Southmoor Primary School’s ninth year of being associated with the Stephanie Alexander Kitchen Garden Program, together with members of the Foundation. During my years as a principal I can unequivocally say that it is this SAKG program that has had the most positive and dramatic impact on curriculum delivery and the health education of children across Australia. The Foundation’s vision, passion and commitment led by Stephanie Alexander herself and members of her Board can only be described as unwavering and outstanding.’ (Marie Kick, Principal, Southmoor Primary School)

‘Students truly enjoy participating in this program which allows them to prepare fresh and delicious dishes from the produce that they have grown. It’s a real point of pride for them to be able to be able to see and taste the finished product, and on numerous occasions we have had students ask to take home the recipes to cook and share them with their families.’ (Mark Taylor, Deputy Principal, Thorndon Park Primary School)

‘Wednesday the 29th of April was the best day ever, because I got to go outside in the garden at St Johns. I got to help fix up the garden. I also got to work on getting my wheelbarrow licence. We had wheelbarrow races and a driver test. Next I had time working in the kitchen. We worked on herbs, as a class we looked at feeling them and smelling. Next we made fruit skewers, they were awesome. I wanted two. We then had garden activities and made pictures of gardening. The whole thing was called Stephanie Alexander Kitchen Garden Program.’ (Matthew W, Grade 4, St John the Baptist School)

View videos of school experiences on our YouTube channel: https://www.youtube.com/user/kitchengardenfound

Proof it works
This program is a long-term preventive health strategy.

Evaluation of the Program demonstrates positive food behaviour changes in participating children, as well as other related changes.

The Program is also seen as a viable obesity prevention strategy by expert and authoritative bodies including the Australian Government.

Academic research worldwide points to the demonstrated positive effects of cooking and gardening programs in schools.

University of Wollongong evaluation
A Department of Health and Ageing funded evaluation of the Stephanie Alexander Kitchen Garden National Program was undertaken between 2011 and 2012 by the Centre for Health Service Development at the Australian Health Services Research Institute, University of Wollongong.

The evaluation confirmed the positive impacts of the Program, with key findings as below.

- 97% of teachers responded positively to how the Program supported classroom learning. They reported that students found the hands-on activities engaging and it aided learning across other subject areas, commenting that the Program ‘forms an intrinsic part of our students’ learning’.
- Students in Kitchen Garden National Program schools were more likely to report that they would always try new foods as compared to students in comparison schools. The proportion was higher if the students had grown or cooked the foods themselves.
More children are taking up cooking at home and starting backyard veggie gardens after participating in the Kitchen Garden National Program.

Participating students, staff and school communities all reported that the Kitchen Garden National Program had made positive impacts on the school and students.

Students found the activities of the Program to be a positive context for learning across multiple subject areas.

Teachers and parents reported improvements in students’ social behaviours, with 86% of teachers reporting improvements in students’ teamwork skills and 50% of parents reporting improvements across a range of student behaviours, including modifying previous bullying behaviour, managing difficult behaviour, interacting with people of many ages, leadership skill development and sense of pride in the school.

In particular, teachers commented that the Program’s hands-on approach to learning gave students from a range of socio-cultural groups and with differing levels of ability the chance to participate equally and to improve. Teachers reported the following changes in students at risk of social exclusion:

- healthier eating habits
- more likely to try new and healthy foods
- increased participation, engagement and attendance
- improved self-esteem and confidence
- increased opportunities to learn differently
- advancement in different areas
- further developed life skills
- improved social skills and communication.

Parents shared that as a result of the Program:

- children always tried new foods if they’d grown or cooked them
- children liked cooking more and helped with cooking more often at home
- children asked parents to cook the foods from the Program
- they prepared more meals at home
- children exhibited greater confidence with garden activities
- children learnt new things in the garden
- they worked more in their home garden with their children.

University of Melbourne/Deakin University evaluation

An evaluation of the Stephanie Alexander Kitchen Garden Program was undertaken between 2007 and 2009, by a joint research team from the Faculty of Health, Medicine, Nursing & Behavioural Sciences, Deakin University and the McCaughey Centre: VicHealth Centre for the Promotion of Mental Health and Community Wellbeing, University of Melbourne. The key findings of the evaluation are as follows:

- There was strong evidence of increased child willingness to try new foods including a significant difference between program and comparison schools.
- There was evidence of statistically significant increases in child knowledge, confidence and skills in cooking and gardening.
- The kitchen classes were greatly enjoyed by children, and the children at program schools were significantly more likely than children from comparison schools to report that they liked cooking ‘a lot’.
- Children’s competent use of knives in the kitchen appeared to be particularly valued by all stakeholders as evidence of skill but also as a symbol of trust.
- The program was considered particularly effective at engaging ‘non-academic learners’ and children with challenging behaviours.
- The SAKG Program helped to create links between schools and the community. This was often noted as one of the program’s most important outcomes.
- Transfer of program benefits to the home environment was not one of the goals of the program but is emerging as a flow-on benefit.
- The SAKG Program is associated with substantial financial cost and even greater community investment in terms of the resources of time and materials used.
- Program schools on average generated $1.93 of additional resources for every $1 of government funding invested in the SAKG Program.


Government commitment

The Australian Government’s National Food Plan (2013) lists investment in the Program as a key method of achieving Government goals in promoting healthy behaviours and addressing lifestyle-related diseases, including obesity; ensuring Australians will have the information they need to help them make decisions about food; and ensuring Australian children will have a better understanding of how food is produced:

“The Stephanie Alexander Kitchen Garden National Program is leading the world in bringing enjoyable food education to children within a systematic, integrated and effective model. We have joined state and territory government and corporate partners in funding this valuable program. We have invested $18.2 million to develop gardens in more than 650 schools across Australia to 2015.’

Preventative health agency endorsement

The Kitchen Garden Program is seen by many health promotion agencies as a viable intervention strategy addressing childhood obesity.

The Obesity Australia Action Agenda 2013 recommends five key actions to address the prevention of obesity in Australia, one of which is introducing the Stephanie Alexander Kitchen Garden Program into every primary school in Australia:

‘Australia has a proud record of leadership in niche areas of preventative medicine – seat belts, slip/slop/slap, bilateral cochlear implants before the age of one for profoundly deaf infants. The Stephanie Alexander Kitchen Garden Program, already operating in a minority of Australian primary schools, is another Australian first, is recognized as such around the world, and serves as a model for other countries.

‘[Extending] this program to all primary schools in the country will confirm and cement our leadership role in this area of education and health.’

Academic research

- **School nutrition, wellness program improves eating habits, lowers BMI**
  Date: 27 April, 2014; Source: Federation of American Societies for Experimental Biology (FASEB)
  [sciencedaily.com/releases/2014/04/140427185146.htm]

- **School-based gardening encourages healthier eating in children**
  Date: 7 May, 2014; Source: British Psychological Society (BPS)
  [sciencedaily.com/releases/2014/05/140507211701.htm]

- **Gardening provides high-to-moderate physical activity for children**
  Date: 31 January, 2014; Source: American Society for Horticultural Science
  [sciencedaily.com/releases/2014/01/140131130850.htm]

- **School-based kitchen gardens are getting an A+: New study highlights benefits of for both children and parents**
  [sciencedaily.com/releases/2013/03/130307092509.htm]

- **Cooking in the classroom to fight childhood obesity**
  [sciencedirect.com/science/article/pii/S1499404611003824]

Further information

The Stephanie Alexander Kitchen Garden Foundation views the increasing attention of health bodies on school-based food education programs that include hands-on gardening and cooking experiences, as well as government activity in this area, as evidence of the viability of these programs. An example selection follows.
School Food Plan/UK Curriculum

In the UK, practical cookery and food education are compulsory in the new national curriculum from September 2014, in line with the School Food Plan.

- School Food Plan: [schoolfoodplan.com](schoolfoodplan.com)
- Jamie Oliver’s Kitchen Garden Project: [jamieskitchengarden.org](jamieskitchengarden.org)

The Scottish Government’s ‘Better Eating, Better Learning – A New Context for School Food’
[scotgov.publishingthefuture.info/publication/better-eating-better-learning-a-new-context-for-school-food](scotgov.publishingthefuture.info/publication/better-eating-better-learning-a-new-context-for-school-food)

The New Zealand Children’s Commissioner’s ‘Guidelines for School Food Programmes’
[occ.org.nz/assets/Publications/Guidelines-for-Food-in-Schools.pdf](occ.org.nz/assets/Publications/Guidelines-for-Food-in-Schools.pdf)

The World Health Organization

Thank you so much for considering our case for pleasurable food education to play its role in addressing the obesity epidemic in Australia in a pleasurable, fun and hands-on way. To find out more about the children and their learning experiences please visit:
[www.kitchengardenfoundation.org.au](www.kitchengardenfoundation.org.au)

Many happy deliberations,
Ange Barry
CEO
Stephanie Alexander Kitchen Garden Foundation
July 2016