

2007 NSW Health Awards Entry

*Complete under the following headings and use the italics as a guide.
Remove the italics when completed.*

Entry Title (50 characters or less)

A Healthy Start to Life – Munch and Move



Abstract (120 Words)

One in four children is overweight and the level is rising each year. Childhood obesity prevention strategies can result in immediate improvements in child health and well being and can prevent many chronic diseases. Early childhood is the critical time to establishing healthy lifestyles so a diverse team of health professionals designed a healthy eating and physical activity program for preschools. The program targets the preschool staff, parents and children directly. Results from the first year show that this innovative program has successfully improved physical activity and nutritional intake. The program is transferable and is a good example of how we can make prevention everyone's business.

Aim (30 Words)

The Munch and Move project aims to reduce the rising level of childhood obesity by increasing physical activity and reducing intakes of energy-dense food and drinks of preschool children

Nature of the Problem (100 words)

Overweight is caused by an imbalance between energy intake and output. To prevent overweight, experts (Ebbeling et al., 2002, Dickenson & Wilson, 2005, Schiller & Broadhurst, 2002, Gill et al., 2005), recommend:

Children should;

- decrease intake of energy-dense nutrient-poor (EDNP) food and drinks
- increase fruit and vegetable consumption
- increase physical activity
- improve fundamental movement skills (FMS)

Parents should:

- feel confident in providing healthy food and drink choices
- increase participation in children's active play

Preschools should:

- increase skills in teaching FMS
- implement clear policies on healthy eating and physical activity

Extent of the problem (150 words)

Childhood obesity is an increasing problem in Australia and local statistics reflect the appalling national levels (NSW Health, 2003). A qualitative needs analysis of parents and preschool staff showed that the main concerns were regarding children's diets. With ethics committee and parent's permission, we collected quantitative data from seven preschools. We measured children's body mass indices and FMS and conducted a lunchbox audit. Parent surveys reviewed diet, activity patterns and parenting styles. We found that many North Coast children had low intakes of vegetables and high intakes of EDNP snacks and sweet drinks and 9% of children watch too much television. Children were more likely to be overweight if they ate dinner with the television on, or if they consumed two or more sweet drinks per day.

Strategic importance (100 words)

The project satisfies three targets in Strategy One of the State Health Plan (NSW Department of Health, 2007):

- a) Stop the growth in childhood obesity...
- b) Increase the proportion of five year old children without dental decay...
- c) Increased participation an integration in community activities and increased participation in recreation, sporting...

This project meets targets in two other of the strategies:

- Strengthen primary health & continuing care in the community. The project prevents hospital admissions through prevention and prioritises preschools with Aboriginal children.
- Build regional & other partnerships for health. Partners include; DOCS, DET, TAFE, SCU and the community.

Planning and implementing solutions (300 words)

The program follows best evidence (Gill et al., 2005, Centre for Disease Control (US), 2001, International Obesity Taskforce, 2002) but is the first of its' kind in Australia. The healthy eating component was adapted from our school program, Tooty Fruity Vegie. We established an advisory committee consisting of health and early childhood education experts and DOCS Children's advisors who ensure the program meets the regulations and standards for preschools.

Our team developed the strategies and each preschool has its own project management team (with representatives from health, preschool staff and parents) to ensure the strategies were completed.

The healthy eating program includes:

- Practical policies to ensure children bring healthy food to preschool and that they drink water and milk rather than sweet drinks.
- Workshops and newsletters to give parents the necessary skills to provide healthy foods for their children and to cope with 'pester power'
- positive and practical nutrition sessions so children can grow, cook and eat fruit and vegetables,
- drama, art, music and dance activities and a puppet show to reinforce the healthy messages

The physical activity program includes:

- Training preschool staff to provide a twice weekly FMS program to children
- Motivating and skilling parents to encourage physical activity and reduce sedentary behaviours.

Outcomes and Evaluation (200 words)

Preliminary findings of the pilot study show that the program improved FMS and nutritional intake of children:

- Control and intervention preschools both improved their FMS, but intervention children had significantly more improvement (fig. 1)
- There was a significant increase in fruit in lunchboxes among intervention compared to control children (fig. 2).
- There was a significant decrease in unhealthy snacks among intervention children's lunchboxes in comparison to controls (fig. 3)
- Intervention preschools had a decrease in the proportion of overweight children and a decrease in average Body Mass Index.

Figure 1. Intervention Effect - Motor Skills Quotient (which adjusts for gender and age (maturation))

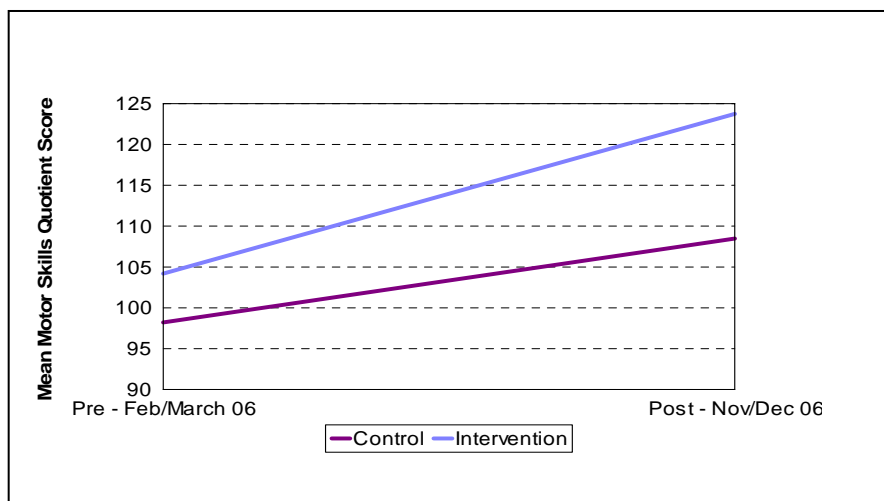


Figure 2: Pre and post levels of fruit in lunch boxes

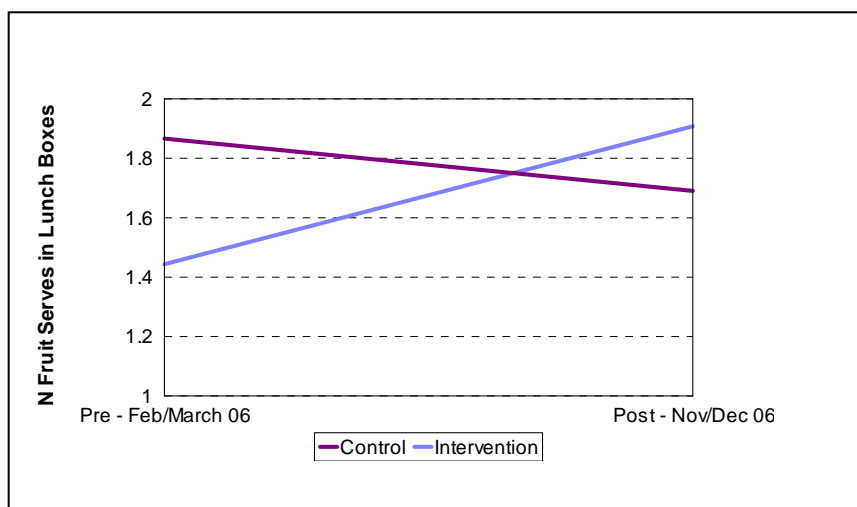
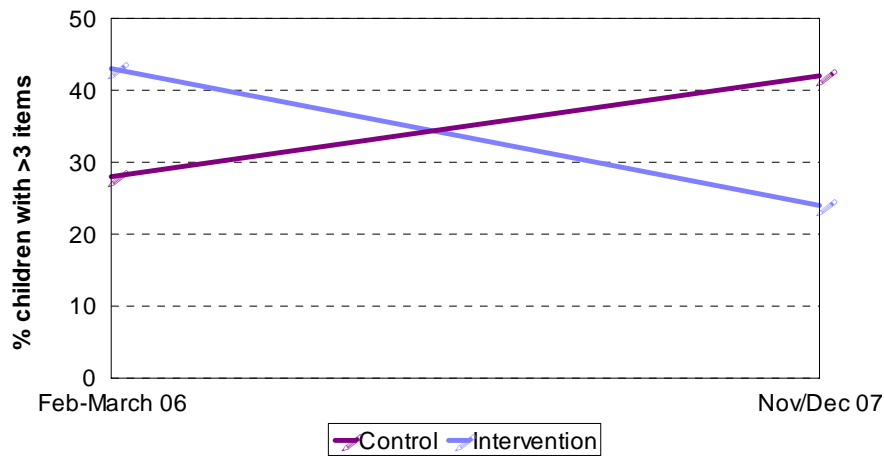


Figure 3. Proportion of children with >3 unhealthy items in lunchbox



In 2007, the program was extended to 12 additional preschools. This will help reduce the rising levels of childhood obesity which will improve children's health and well-being and reduce the incidence of many chronic illnesses.

Sustaining change (100 words)

The following processes will ensure sustainability of the project beyond the intervention year:

- Project Management Teams will continue to coordinate activities in preschools.
- Preschool staff training in nutrition, physical activity and FMS ensures staff have the skills to continue
- Policy development ensures practices such as FMS activities and healthy lunchboxes continue.
- The project encourages preschools to use products of the project (e.g cookbooks, garden harvests) to fund ingredients for cooking classes.
- Partnerships between preschools and local health services will be established.

Future Scope (100 words)

This program was innovatively and comprehensively evaluated, NSW Health will finance a state wide roll out of the program in all child care centres beginning in 2008. We are working with TAFE to include nutrition and physical activity training in the Child Care Studies course and with partners are negotiating to include physical activity standards in accreditation of preschools nationally.

References

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Ebbeling, C. B., Pawlak, D. B. & Ludwig, D. S. 2002, Childhood obesity: public-health crisis, common sense cure. *Lancet*, 360, 473-482.

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Total: 1200 words (including references but excluding reference list and entry title)