

# TOOTY FRUITY VEGIE PROJECT

## CHEGS Inc



## **Final Report to National Child Nutrition Program on Phase 2 (2002 – 2003)**

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September 2004

## ACKNOWLEDGMENTS

The Tooty Fruity Vegie project would not have been possible without the help and support of many individuals and organisations. We would like to acknowledge and thank the following for their support:

- The National Child Nutrition Project for generously funding the project in 2002 and 2003.
- The Northern Rivers Area Health Service's Health Promotion Unit – for funding and supporting the TFV team and the project's implementation and outcome evaluation.
- The NSW Cancer Council's Lifestyle and Cancer Program – for funding the production of the teacher's manuals.
- The local Departments of Education and Training and Parents and Citizens Associations – for their enthusiastic collaboration and support of our project.
- The many Community Nutritionists, Health Promotion Officers, Community Nurses, Dental Therapists, School Nurses, other Community Health staff and other individuals throughout the Northern Rivers region who helped with implementing the various TFV activities, including participating in schools' Project Management Teams.
- The many Community Health and Health Promotion Unit staff and other individuals who helped with administering the various data collections throughout the project.
- The Western Australian "Kids in the Kitchen" project, the National Nutrition Education in Schools program, the Queensland Fruit and Vegetable Growers, the NSW Fresh Fruit and Vegetable Industry, the Charge Through Your Day project and the many other organisations who generously shared their resource materials with our project.
- The Australian Gardening Industry, the Nurserymen's Association, Daley's Nursery, Yates and Mr Fothergills – for donating and providing cost price seeds, trees and planting kits for use in school fruit and vegetable gardens.
- Coles supermarkets and the Dietetics Association of Australia 7-A -Day program for sponsoring the production of "Crazy Carrot" costume.
- Jan Reynolds – for work in developing the National Nutrition Education in Schools program.
- The principals, teachers, canteen staff, Aboriginal Education Assistants, volunteers and Parents and Citizens Associations from all schools – for their enthusiastic contributions towards implementing the TFV project.
- The children and parents from all schools – for their frequent contributions in implementing, participating in and evaluating the TFV project.
- The many unpaid volunteers and Nutrition & Dietetics students from Wollongong, Charles Sturt, Griffith and Newcastle Universities – for their enthusiastic contributions towards implementing the project.
- Mary Ward – for her substantial contribution in administering the funds and monitoring the accounting and auditing processes.
- Denise Hughes – for her substantial contribution in preparing for the various data collections and in coding and entering the data from them.
- Lyndy McPhee – for her substantial contribution in preparing many of the resource materials used in the project and for her assistance in producing this report.



The artwork on the cover of this report was one of the winning entries in a children's fruit and vegetable poster painting competition held in 2000.

# *The Tooty Fruity Vegie Project*



## Summary

The **Tooty Fruity Vegie** project was a two-year, multi-strategic health promotion program aimed at increasing fruit and vegetable consumption among primary school children in the Northern Rivers region of NSW. The project promoted a whole-of-school approach to implementing a range of evidence-based school and community strategies promoting fruits and vegetables in thirteen intervention schools. The implementation by a broad range of Health Service staff in partnership with the Department of Education and Training, industry, local government and the community and financed by the National Child Nutrition Project has allowed funding to extend a long way. The program has been extensively evaluated and is successful in achieving its outcomes and is enjoyable to teachers, children and parents. The Tooty Fruity Vegie team have trained health professionals from across Australia to implement the program in their regions and all resources are available to the public via a free website.

## **A. Summary of Action Taken**

### **Planning and resource development**

The Tooty Fruity Vegie (TFV) project commenced in the second half of 2001. Both strategic and business plans for the project were completed and then project staff were recruited. Ethics clearances were obtained from the NSW Department of Education and Training and from the local Northern Rivers Area Health Service Ethics Board. The project name was registered and all primary schools (approximately 300) in the region were invited to express an interest in joining the project. Project staff met with principals from interested schools and discussed the project implications for the school communities, and in particular the evaluation requirements of the project. Project staff then met with local health promotion officers and community nutritionists to ascertain their interest and commitment to the project. As a result of these discussions, 14 schools were invited, and agreed, to participate and were matched with local health practitioners or TFV project staff. As one of these schools withdrew very early in the project's implementation, this report focuses on the remaining 13 schools. Six schools that could not be matched with project staff were offered resources but not staff. Existing TFV resources were reviewed and updated or replaced and printed in sufficient copies for all the schools.

### **Baseline evaluation and program planning**

Late in 2001, baseline evaluations were conducted in all participating schools, consisting of:

- Parents completing a prospective 24-hour food record detailing their child's food and drink intake.
- Teachers completing a survey about their attitudes and practices re: promoting fruit and vegetables.
- Children in years 3/4 – 6 completing a survey about their attitudes towards fruits and vegetables and activities promoting them at school.
- Canteen Managers completing a survey about their canteen operations and any strategies used to promote fruits and vegetables.
- TFV Project Officers meeting with school representatives (principals, canteen managers, teachers, Aboriginal Education Assistants, students, Parent and Citizen groups) to complete a Strategy Implementation Index about any strategies used to promote fruits and vegetables within the school setting during the previous year.

At this meeting the TFV Project Officers also formed each TFV School Project Management Team (TFV-SPMT) to oversee the project in each school. Each TFV-SPMT then considered all the possible strategy options and selected those that best suited their school community. Each TFV-SPMT continued to meet for the two years of the intervention and guide the project locally. Each TFV-SPMT also monitored the success or otherwise of individual TFV activities and assisted in planning the evaluation within the school.

### **Program implementation**

The implementation of the program was undertaken at differing times in different schools, however; generally the following strategies were implemented:

#### ***Classroom activities, children's cooking and gardening programs***

- The TFV team provided classroom resources and teacher training to all teachers.
- Teachers implemented most of the classroom activities but were assisted by volunteer parents in some schools.
- Quality cooking resources developed across Australia were used, including WA Health's "Kids in the Kitchen"

cooking program. In most schools, each child participated in the cooking program once per term. Many schools had sponsorship arrangements with local supermarkets or greengrocers who gave healthy ingredients in exchange for free advertising in the local school newsletter.

- Volunteer parents were trained by the TFV Project Officer and provided with kits, cooking manuals, aprons and funds for ingredients and equipment for running the children's cooking programs. Volunteers were sent a newsletter each term to keep them motivated and informed of what other schools were doing.
- A carrot costume was made and used in each school to focus attention on the program. "Crazy carrot" visited the schools on sports days and distributed carrots sticks and other vegetables to children.
- Teachers organised for students to have "fruit and veggie breaks" at 10 am.

### ***Promotions and resources aimed at parents and carers***

- Local Community Health staff were trained to implement promotions aimed at parents and children. These included healthy lunchbox displays and cooking demonstrations aimed at increasing fruit and vegetables in meals prepared at home.
- The TFV Project Officer provided fruit and vegetable promoting articles for school newsletters twice per term and distributed other resources targeting parents.
- The TFV team produced calendars for each family listing the schools events for the two years and tips for increasing fruits and vegetable consumption in their children.

### ***School canteens***

- The TFV project also used state and national resources for school canteens and the whole school community.
- Local Community Nutritionists and the TFV Project Officer assisted school canteens to increase their sales of fruit and vegetables by special promotions, healthy pricing policies and redesigning canteen menus and canteen layouts.

### ***School environments and gardens***

- Parents, grandparents and teachers assisted children in their vegetable gardens. The TFV project provided gardening kits to all schools and arranged for seed companies to donate vegetable seeds to schools. Fruit trees were provided to each school.
- A Policy and Practice book (attached) was distributed to schools with tips on healthy eating habits at school.

### ***Tooty Fruity Vegie Week***

- In the second year of the project, schools were assisted to host a TFV week to provide even more emphasis on the project. The Sydney Marketing Authority donated incentives for children to participate in school competitions and the TFV team gave each child a TFV name tag for their lunch box and drink bottle as well as a fridge magnet for home.

### **Interim evaluation and ongoing program planning**

At the end of the first year, TFV-SPMTs, with the help of their meeting minutes, completed another Strategy Implementation Index summarising the strategies used to promote fruits and vegetables within the school setting during that year. These Indexes were also used as the first stage of the TFV-SPMT's planning process for the next year, including questions about which strategies the school planned to use the following year. These surveys were also completed by the six schools which were given the TFV resources but not staff. In addition to this, TFV-

SPMTs were required to complete an Event Summary Sheet for every TFV event held.

### **Program sustainability**

During the second year, schools were encouraged to consider ways of sustaining the TFV program beyond 2003. Some examples of these sustainable strategies included:

- Continuing the TFV-SPMTs to maintain the project after the 2 year intervention period.
- Continuing to care for vegetable gardens and fruit trees.
- Continuing to provide fun cooking classes promoting easy, healthy recipes for children and their parents, as an ongoing part of the curricula.
- Continuing to provide healthy food in school canteens.
- Continuing to use the classroom resources supplied to every teacher.
- Maintaining or reviewing school policies relating to food provision in school, including healthy fundraisers and rewards.
- Continuing networks between principals, teachers, canteen staff and parents across schools participating in TFV.
- Continuing to train, support and motivate volunteers (mainly parents) to help with implementing many TFV strategies.
- The project also encouraged schools to consider ways of raising money to cover the costs of their TFV project activities – e.g. charging minimal amounts for food tastings and cooking classes, selling produce from their fruit and vegetable gardens or preparing and selling books (supplied at cost price) and developing and selling school fruit and vegetable cookbooks.

Towards the end of the second year, schools were invited to apply for small sustainability grants to help with the costs of TFV activities planned for 2004. To receive a grant, schools had to submit a brief plan of how they would use the money – as an extra incentive to develop a plan for after the intervention period. Eleven of the 13 schools requested, and were granted, these sustainability grants. However, follow-up contact has shown that all 13 schools have continued with TFV strategies. Examples of sustained activities include the Kids in the Kitchen cooking program, vegetable gardens, developing a bush tucker garden to complement the veggie garden, supporting fruit and vegetable breaks, providing fruit platters at school functions and special vegetable promotions in school. TFV staff have continued to provide ad hoc follow-up and advice to these 13 schools throughout 2004.

### **Post-test evaluation**

Late in 2003, post-test evaluations were conducted in all participating schools, repeating the parent, teacher, child and Canteen Manager surveys collected in the baseline evaluation and collecting a third Strategy Implementation Index about the strategies used to promote fruits and vegetables within the school setting during the second year.

The schools receiving only the resources were also contacted in at the end of 2003 to see how the project had been going. Very few, if any, of the TFV strategies had been taken up. One teacher commented that they would have been more motivated to do the program if they had received specific instructions for activities at regular intervals over the two years rather than getting all the resources at the start.

### **Program duplication**

In July 2003, the TFV team held a national workshop where 23 health professionals from across Australia learned how to implement the project in their own regions. Many of these participants have already started the project with

local schools. In addition, four papers based on the results from the project's first phase have appeared in peer reviewed scientific journals in the past two years and another paper is under editorial review. (See enclosed copies of printed papers). The TFV team have also given presentations at national and state health promotion, nutrition and school conferences across Australia. All the TFV resources are freely available to the public via our TFV website [www.nrahs.nsw.gov.au/population/promotion/tooty\\_fruity](http://www.nrahs.nsw.gov.au/population/promotion/tooty_fruity), which is consistently in the top ten most visited pages of the Northern Rivers Area Health Service website, averaging around 800 visits a month.

### **B. Outcomes in Comparison to Project Objectives**

<b>OBJECTIVE 1: Prepare for new round of TFV project - Completed</b>	
<b>Strategy / Milestone</b>	<b>RESULTS</b>
Register project name and formalise arrangement with CHEGS Inc.	Arrangements made with CHEGs Inc. Project name registered.
Recruit TFV project staff.	Project Manager and Project Officer appointed
Develop strategic implementation plan & clear business & evaluation plans.	Plans developed, consultation undertaken
Write to all eligible schools in the region.	All schools asked for expressions of interest
Process and prioritise schools' applications.	Applications sorted
Meet with short listed schools re: project implications.	Interviews with all interested schools
Select and notify the 10 – 15 schools to participate.	14 schools selected, further 6 schools offered limited support
Review existing project materials and revise, where necessary.	Project materials under review. Parent Event and Gardening kits created, Teacher resource folders out for DET review. Calendars for each child in production
Produce sufficient copies of finalised project materials.	To be produced as per Implementation Calendar for use as required.
Assign TFV Project Officers & hold initial meetings in all schools.	TFV Onsite Project Officers assigned. Implementation calendar for project team meetings developed. School meetings being scheduled.

<b>OBJECTIVE 2: Implement TFV project in another 10-15 schools - Completed</b>	
<b>Strategy / Milestone</b>	<b>RESULTS</b>
Establish School Project Management Teams (TFV-SPMTs) in each school.	Following interviews with approx. 25 interested schools, 14 were recommended and accepted by the Management Committee to be in the project although one school dropped out before the baseline evaluation was completed. Six others received all the materials and will attempt to implement TFV without Project Officer support. Those 13 schools each established TFV-SPMTs.
Support, meet regularly with & motivate TFV-SPMTs.	There is strong school community representation on the teams and they are enthusiastically driving implementation in their schools.

OBJECTIVE 2: Implement TFV project in another 10-15 schools - <i>Completed</i>	
Strategy / Milestone	RESULTS
Help TFV-SPMTs organise & implement TFV activities.	TFV-SPMTs meet at the beginning of each term to plan the term's activities and strategically plan. Strategies from the whole of school approach are selected depending on the school's needs and priorities. All 81 teachers in the TFV schools have received stage specific teacher guides; and have provided strong positive feedback on their use. All onsite project officers and student nutritionists have Parent Event kits providing a range of ideas, flyers and how to evaluate ideas to use when working with the TFV-SPMTs in planning events. Canteens have been visited and worked through a Canteen Manual. Gardening kits with ideas of different gardening methods, involving children and the curriculum and seeds have been given to a gardening rep. Kids in the Kitchen parent volunteers have been given recipe books, aprons, cooking kits and training to undertake F&V preparation in the classroom. Parents receive flyers twice a term through school newsletters.
Conduct interim process evaluation to guide Year 2 implementation.	So far 63 Event Summary Sheets have been collected from the 13 participating schools, each one provides feedback on specific strategy events in a school. All of the TFV-SPMTs have completed Strategy Implementation Indexes, which summarise the school's participation in TFV strategies in 2002 and their intention to undertake the strategies in 2003. Of the returned SII all but one school are wholeheartedly committed to a second year of multistrategic whole of school implementation.
Produce additional copies of project materials.	At each initial TFV-SPMT meeting, further copies of resources were offered. Over the term break ALL TFV material was reviewed and has been scanned into PDF files for website access. Teachers have provided strong positive feedback in focus groups on teacher materials where only minor edits were recommended, and more Timesavers requested and provided. All schools have received "Food Dudes" videos produced by the Bangor Food research Unit in Wales, UK. A carrot costume partially funded by DAA and Coles5aDay has been enormously popular with children. Lunchbox and drink bottle stickers with the TFV message and space for name and class have been given to all children. All onsite project officers and student nutritionists have Parent Event kits providing a range of ideas, flyers and how to evaluate ideas to use when working with the TFV-SPMTs in planning events. By the end of November all 13 schools had undertaken their TFV Weeks with the support of Nutrition students and project officers Canteens have been visited in 2003 and worked through a Canteen Manual, plus been given 3 sample menus to use as inspiration. Strong encouragement was given for NSWSCA accreditation with one school gaining a Silver Award and another achieving the Commendation Award. Gardening kits with ideas of different gardening methods, involving children and the curriculum and seeds have been given to a gardening rep. Fruit trees have been given to each school. Kids in the Kitchen training has been provided at 4 sites in 2003; parent volunteers have been given recipe books, aprons, cooking kits and training to undertake F&V preparation in the classroom. Parents received flyers twice a term through school newsletters.
Advise TFV-SPMTs about implementing TFV activities.	TFV 2003 Calendar distributed to all schools, including "hands off" schools, in Feb 2003. Onsite Project Officers have been given the covering letters and cheques to supplement Kids in the Kitchen ingredient purchase. Onsite Project Officers met together at least once a term to discuss planning and implementation issues, and to exchange experiences.
Encourage sustaining TFV activities in schools	Schools were encouraged and supported to develop and adopt policies supporting V&F consumption. Sample policies, procedures and practices have been distributed to School Councils for consideration. Please see booklet titled, "Healthy Eating Habits at School".
Review incoming Sustainability Incentive Grant applications.	Sustainability Grant applications were explained to TFV-SPMTs and Principals. Each school was required to specify how they would use the funds and committed to conducting a brief evaluation of these strategies at the end of 2004. Eleven of the 13 schools applied and were allocated sustainability grants.



OBJECTIVE 3: Evaluate effectiveness of TFV project - <i>Completed</i>	
Strategy / Milestone	RESULTS
Prepare & conduct baseline Food Records in each school.	All completed – see Section F for the results.
Prepare & conduct baseline process evaluation surveys with children and teachers in each school.	
Prepare & conduct baseline Strategy Implementation Indexes in each school.	
Prepare & conduct baseline canteen surveys in each school with a canteen.	
Code, enter, clean and analyse all baseline data.	
Prepare & conduct post-test Food Records in each school.	All completed – see Section F for the results.
Prepare & conduct post-test process evaluation surveys with children and teachers in each school.	
Prepare & conduct post-test Strategy Implementation Indexes in each school.	Additionally, a computer program has been developed to streamline F&V coding.
Prepare & conduct post-test canteen surveys in each school with a canteen.	
Code, enter, clean and analyse all post-test data.	

OBJECTIVE 4: Provide minimal ongoing support to schools - <i>Completed</i>	
Strategy / Milestone	RESULTS
Distribute Sustainability grants.	Sustainability grants distributed to the 11 schools applying.
Monthly phone calls to motivate Project Management Teams.	Follow up contact with schools has shown that all 13 schools (even those two schools who did not apply for the Sustainability Grants) are continuing with TFV strategies in 2004.
Respond to verbal or written queries from Project Management Teams.	Written and verbal queries have been responded to. All TFV school canteen managers were invited to attend a series of workshops outlining the changes required to canteen menus by 2005. The workshops introduced the “Fresh Tastes for Schools” document and participants were able to ask questions related to what changes were needed in their canteen.

### **C, D. How Outcomes not Achieved could be Achieved in the Future**

Since all outcomes were achieved this section is not relevant.

### **E. Analysis of how the Project was Carried Out**

- Each school's Project Management Teams oversaw the running of the project in each of the 13 schools. Project Management Teams had representation from Parents and Citizens Committees, canteen managers, teachers, principals, Aboriginal Education Assistants and students.
- Within the Health Promotion Team, expert advice and assistance in planning was provided by the Research and Evaluation Co-ordinator and Health Promotion Manager. The Public Health Nutritionist worked with the TFV Project Officers and Co-ordinator.
- This TFV Team worked in partnership with the Department of Education and Training in providing leadership for the program.
- Support was enlisted for the evaluation process and implementation of strategies in schools from other members of the Division of Population Health and local Primary Health Services and, of course, teaching staff.

- Once the project was underway, the teams were also supported by volunteers in the community (parents) and students studying health promotion, dietetics and nutrition.
- Teacher training was provided by the Project Officer, who was a teacher before her career in health promotion.
- The fruit and vegetable industry, local governments and horticultural industry supported the program by providing free resources for schools, in particular for the school canteens and gardens.

## **F. Results from Project's Evaluation – Against Project Objectives**

A range of survey instruments (as described in Section A) were administered, before and at the end of the intervention period, to evaluate the TFV project in relation to the following objectives:

- **Process Objectives** – exploring rates of uptake, quality of implementation and acceptability of the key TFV project strategies.
- **Impact Objectives** – exploring the impact on children's attitudes towards fruits and vegetables (F&V); children's recall and enjoyment of F&V promoting strategies at school; teachers' attitudes towards F&V promotion in schools; teachers' and Canteen Managers' use of F&V promoting strategies.
- **Outcome Objectives** – exploring its impact on children's F&V consumption levels.

Basic univariate results are presented below against each of these objectives, with significance test results where possible – based on z-tests (for proportions) or t-tests (for continuous data). However, further multivariate analyses are planned to explore the data in more depth, in conjunction with additional data from the first phase of the TFV project. Therefore, these univariate results should be considered preliminary for the following reasons:

- As the data from teachers, children and parents are clustered in groups from schools, rather than from randomly selected individuals, further analyses need to adjust for variations explained at the school level as well as at the individual level.
- As children have entered and left the schools during the two years of the project, while there is much overlap between the baseline and post-test samples, many children do not have both baseline and post-test surveys or food records which can be matched – this makes using many statistical tests difficult and will require complex hierarchical modelling in order to fully interpret the data available.
- This also means that children have had differing levels of exposure to the TFV project activities – which will also be taken into consideration in future modelling analyses.
- Many of the data are not normally distributed – this makes using many statistical tests difficult and may require data transformations in order to fully interpret the data available
- As detailed in Table 1, response rates for the children's survey and the food record were significantly lower at post-test than at baseline – this could introduce selection bias due to differences between responders and non-responders, which need to be explored.
- As detailed in Table 2, the post-test children's surveys came from a significantly younger and more female group of students than the baseline ones – therefore, any indicators which are influenced by age and gender will need to be adjusted accordingly.
- As summarised in Table 3, schools implemented different combinations of the available TFV strategies, at differing levels of quality – therefore, further analyses will explore the impact of these differing levels and quality of implementation on the various impact and outcome indicators.

## Survey response rates

As shown in Table 1, completed children's surveys and food records were returned from around 60% of children, although the response rate was significantly lower at the post-test than at the baseline. Response rates for the other instruments were higher and similar at both baseline and post-test.

Table 1: Numbers distributed and response rates for each survey instrument

Survey	Baseline (Nov 2001)			Post-test (Nov 2003)		
	N eligible	N complete	% response	N eligible	N complete	% response
Children's survey <sup>a</sup>	819	508	62%	950	518	55%
Food record <sup>a</sup>	1897	1221	64%	1874	1080	58%
Teachers' survey	84	71	85%	84	61	73%
Canteen survey	10	10	100%	10	9	90%
Strategy Implementation Index <sup>b</sup>	13	13	100%	13	13	100%

<sup>a</sup> Significantly different between baseline and post-test at  $p \leq 0.005$

<sup>b</sup> An interim Strategy Implementation Index was also completed by all 13 schools (Nov 2002)

## Sample characteristics

### *Children*

As shown in Table 2a, there were significantly more girls and younger children completing the child survey at post-test than at baseline. Just under three quarters of the children surveyed at the post-test attended the schools throughout the whole intervention period.

Table 2a: Demographic characteristics of the children surveyed

Group	Gender <sup>a</sup>		Year at school <sup>b</sup>		Attended school in 2002-03	
	Male	Female	Yr 3-4	Yr 5-6	Some	All
Baseline (n = 508)	50%	50%	35%	65%	--	--
Post-test (n = 518)	43%	57%	43%	57%	27%	72%

<sup>a</sup> Significantly different baseline and post-test at  $p \leq 0.05$  <sup>b</sup> Significantly different baseline and post-test C at  $p \leq 0.01$

NB: Row totals may not add to 100% due to missing values

As shown in Table 2b, however, there were no significant differences in the age or gender of the children with completed food records at baseline and post-test.

Table 2b: Demographic characteristics of the children with completed food records

Group	Gender		Year at school		
	Male	Female	Yr K-2	Yr 3-4	Yr 5-6
Baseline (n = 1221)	49%	51%	44%	28%	28%
Post-test (n = 1080)	46%	54%	40%	31%	29%

### *Teachers*

Of the 61 teachers completing surveys at post-test, 43 (70%) taught at the school throughout the two year intervention period. The teachers surveyed provided good representation across all student years at both baseline and post-test.

## ***Canteens***

At baseline, six of the 10 canteens opened every day, one opened four days, two opened three days and one opened two days per week. Similarly, at post-test, four of the nine canteens opened every day, one opened four days, two opened three days, one opened two days and one opened one day per week.

At baseline, six of the 10 canteens had paid managers, all had volunteers and one also had student help. Similarly, at post-test, five of the nine canteens had paid managers, all had volunteers and one also had student help. Decisions about which foods to stock were made by the manager in seven of the 10 canteens at baseline and five of the nine canteens at post-test – with decisions in the remainder made by a committee.

At baseline, seven of the 10 canteens reported making a profit, while three reported breaking even. At post-test, four of the nine canteens reported making a profit, while four reported breaking even and the other said it varied.

## **Process indicators**

### ***Level and quality of strategy implementation***

Annual Strategy Implementation Indexes recorded schools' levels of implementation of each key TFV strategy, assessing the proportion of relevant individuals reached (reach), the number of times exposed (frequency) and the quality of the implementation (quality). Overall implementation scores were calculated by multiplying schools' reach, frequency and quality scores for each strategy – see Appendix for schools' raw scores for each strategy. As shown in Table 3, most strategies were already being implemented by at least one school prior to TFV – in 2001. However, most strategies were implemented by many more schools during the TFV project – in 2002 and 2003. Also, most strategies were implemented at a higher level during the TFV project than previously. Results from the six schools given TFV resources but not staff showed few strategies were implemented.

**Table 3: Strategy implementation levels for key TFV strategies**

	N Schools Doing			Implementation score range	Mean Score Where Done		
	2001	2002	2003		2001	2002	2003
<b>Classroom-based Strategies</b>							
Classroom F&V activities	6	13	13	0 – 1600	27	203	266
Web sites for students	0	4	5	0 – 120	--	17½	34
F&V breaks in class	1	6	11	0 – 1600	1600	384	960
Cooking program (Kids in the Kitchen)	3	13	13	0 – 2820	100	38	309
<b>Family-oriented Strategies</b>							
F&V promoting activities for families at school	0	13	12	0 – 480	--	21	78
School calendars with F&V recipes, etc	1	13	13	0 – 4	4	4	4
F&V promoting articles in school newsletter	1	13	13	0 – 320	160	156	154

	N Schools Doing			Implementation score range	Mean Score Where Done		
	2001	2002	2003		2001	2002	2003
<b>School-oriented Strategies</b>							
Growing F&V gardens in school	3	10	10	0 – 1200	109	284	150
Feedback about F&V in lunchboxes	4	12	11	0 – 1600	60	217	206
Visits to F&V growers / markets	2	3	1	0 – 3	1½	2	2
Providing F&V platters / tastings	2	11	11	0 – 2400	410	101	271
Having healthy breakfast program at school (incl. F&V)	2	3	4	0 – 1200	201	277	509
Healthy nutrition policies (incl. F&V) incorporated into school plans	1	4	9	0 – 40	8	10	18
Having a Project Management Team	1	13	13	0 – 160	24	36	46
<b>Canteen-oriented Strategies (only 10 schools had canteens)</b>							
Canteen a member of NSW School Canteen Association	4	4	4	0 – 600	130	140	260
Canteen promotions of F&V	7	10	9	0 – 320	23	77	56
Networking with other profitable, health-oriented canteens	3	4	4	0 – 30	6	7	10
Reviewing F&V content / price on menus	2	7	5	0 – 48	4	5	25
F&V promotions on kids' lunchbags	0	0	1	0 – 36	--	--	36
<b>Partnership-oriented Strategies</b>							
Involving local F&V shops as sponsors in school	1	8	9	0 – 600	5	109	63
Involving local F&V growers as sponsors in school	0	2	0	0 – 20	--	19	--
Involving local health & education professionals in promoting F&V in school	0	6	3	0 – 30	--	11	17

The most widely implemented strategies across the two year intervention period were F&V breaks in class, cooking classes, F&V platters, classroom activities, growing F&V and lunchbox feedback. These results are reinforced below as these strategies are among the most memorable in the children's survey and the most used in the teachers' survey.

### ***Perceived sustainability***

As shown in Strategy Implementation Index summary in the Appendix, most TFV-SPMTs intended to continue with many of the TFV strategies, with F&V breaks in class, classroom activities, F&V platters, cooking classes, school newsletter articles, growing F&V, lunchbox feedback and F&V tastings at school events proving the most popular.

### ***Children's recall and enjoyment of key TFV strategies***

As shown in Table 4, significantly more children recalled doing all the F&V promoting activities, except school trips, at post-test than at baseline. Enjoyment levels were comparable at both time periods for most activities, except F&V breaks in class and lunchbox F&V checks, which were enjoyed more at post-test and tastings at school events, which were enjoyed less at post-test. Children also reported having done more F&V activities overall at

post-test (group means: 4.1 vs 6.2 activities,  $p < 0.0001$ ). At post-test, the most memorable activities were classroom lessons, cooking classes, canteen promotions and F&V breaks in class and the most enjoyed activities were cooking classes, helping grow F&V, F&V breaks in class and school trips to growers/markets.

**Table 4: Children’s recall and enjoyment of fruit and vegetable activities at school in last 2 years**

Fruit and Vegetable Activity	% recall doing it		% enjoyed or loved it	
	Baseline (n = 508)	Post-test (n = 518)	Baseline <sup>e</sup>	Post-test <sup>e</sup>
Classroom lessons about fruit or veg	62 <sup>d</sup>	82	41	44
Cooking fruit or veg recipes at school	37 <sup>d</sup>	78	69	74
Eating fruit and veg from canteen promotions	53 <sup>d</sup>	70	50	55
F&V breaks in class	24 <sup>d</sup>	62	54 <sup>a</sup>	66
Tasting new fruit or veg in class	29 <sup>d</sup>	60	56	60
Tasting new fruit or veg at special school events	38 <sup>d</sup>	55	65 <sup>b</sup>	52
Helping grow fruit or veg at school (eg: in veg garden)	37 <sup>d</sup>	52	62	68
Homework about fruit and veg	42 <sup>b</sup>	51	32	29
Using computers to learn about F&V	26 <sup>c</sup>	37	51	53
School trips to fruit or veg growers/markets/supermarkets	39	36	68	62
Lunchbox F&V checks	21 <sup>d</sup>	33	18 <sup>a</sup>	29

<sup>a</sup> Significantly different baseline and post-test at  $p < 0.05$  <sup>b</sup> Significantly different baseline and post-test at  $p < 0.005$

<sup>c</sup> Significantly different baseline and post-test at  $p < 0.0005$  <sup>d</sup> Significantly different baseline and post-test at  $p < 0.0001$

<sup>e</sup> Denominators were the number of children recalling doing each strategy

### ***Teachers’ usage of key TFV strategies***

As shown in Table 5, more teachers reported having used all the F&V promoting activities, except school trips at post-test than at baseline – although only four of these differences were statistically significant, due to the relatively small number of teachers available to survey. Teachers also reported using all of the strategies, except school trips, more often at post-test than at baseline but these differences could not be tested significantly due to their non-normal distributions. Teachers also reported having used more F&V activities overall at post-test (group means: 3.4 vs 5.5 activities,  $p < 0.0001$ ).

**Table 5: Teachers’ usage of fruit and vegetable activities in last year**

Fruit and Vegetable Activity	% used strategy		Mean times used	
	Baseline (n = 71)	Post-test (n = 61)	Baseline (n = 71)	Post-test (n = 61)
Classroom lessons about fruit or veg	77	89	9.2	16.8
Cooking fruit or veg recipes at school	38 <sup>c</sup>	77	2.4	5.2
F&V breaks in class	13	57	14.9	62.9
Tasting new fruit or veg in class	42 <sup>b</sup>	69	2.1	6.9
Tasting new fruit or veg at special school events	28 <sup>c</sup>	80	1.6	3.0
Helping grow fruit or veg at school (eg: in veg garden)	27	30	11.8	20.9
Homework about fruit and veg	45	57	2.1	2.5
Using computers to learn about F&V	14	20	0.7	1.4
School trips to fruit or veg growers/markets/supermarkets	21	10	0.7	0.3
Lunchbox F&V checks	38 <sup>a</sup>	59	17.6	28.9

<sup>a</sup> Significantly different baseline and post-test at  $p < 0.05$  <sup>b</sup> Significantly different baseline and post-test at  $p < 0.005$

<sup>c</sup> Significantly different baseline and post-test at  $p < 0.0001$

### ***Canteen policies and structures***

- Eight of the 10 canteen managers surveyed at baseline and eight of the nine surveyed at post-test were aware of the Department of Education and Training's School Health Canteen Policy.
- Four of the 10 canteens at baseline and five of the nine surveyed at post-test had a written canteen policy. None of these policies at baseline and only one at post-test had been reviewed within the previous 12 months.
- Six canteens at both baseline and post-test had canteen committees. Of these committees: all six had parent representatives at both surveys; four at baseline and three at post-test had teacher representatives; five at baseline and six at post-test had canteen representatives; and one at baseline and none at post-test had student representatives.

### **Impact indicators**

#### ***Children's attitudes towards fruits and vegetables***

As shown in Table 6, there were no significant changes in children's attitudes towards fruits and vegetables between the two surveys. Most children had very positive attitudes towards F&V at both times.

Table 6: Children's attitudes towards fruits and vegetables

Statement	% of children			
	Agree a little / a lot		Disagree a little / a lot	
	Baseline (n=508)	Post-test (n=518)	Baseline (n=508)	Post-test (n=518)
Eating fruit and veg every day keeps me healthy	91	92	8	8
I like trying new veg	70	70	30	29
Most veg tastes good	67	64	29	32
I like raw veg	45	47	53	52
I like trying new fruit	87	88	12	12
Most fruit tastes bad	20	19	78	79

NB: row percentages may not add to 100% due to missing values

#### ***Children's access and encouragement to fruits and vegetables***

As shown in Table 7, there were no significant changes in children's access to and encouragement to eat fruits and vegetables between the two surveys. Most children had very high levels of access to F&V and were encouraged to eat them at both times.

Table 7: Children's access and encouragement to fruits and vegetables

Statement	% of children			
	Agree a little / a lot		Disagree a little / a lot	
	Baseline (n=508)	Post-test (n=518)	Baseline (n=508)	Post-test (n=518)
We have veg at dinner most nights	88	86	10	12
We usually have lots of fruit around at home	91	89	8	9
We grow fruit or veg at home	64	61	34	37
I can get my own fruit and veg snacks at home	87	83	11	15
I'm good at preparing fruit and veg	74	73	24	25
My parents encourage me to eat fruit and veg	87	88	11	10

NB: row percentages may not add to 100% due to missing values

### ***Perceived parental attitudes towards F&V promotion at school***

As shown in Table 8, teachers perceived better parental attitudes towards fruit and vegetable promotion in schools and willingness to help with them at post-test than at baseline – although only the latter difference was statistically significant due to the small numbers of teachers surveyed.

**Table 8: Perceived parental attitudes towards fruit and vegetable promotion in schools**

Statement	% of teachers			
	Agree a little / a lot		Disagree a little / a lot	
	Baseline (n=71)	Post-test (n=61)	Baseline (n=71)	Post-test (n=61)
Parents are keen to help with school fruit and vegetable promotions (eg: cooking classes)	38 <sup>b</sup>	67	44 <sup>a</sup>	23
Parents aren't really interested in fruit and vegetables being promoted to children at school	30	21	65	74

<sup>a</sup> Significantly different baseline and post-test at  $p < 0.05$       <sup>b</sup> Significantly different baseline and post-test at  $p < 0.0001$   
 NB: row percentages may not add to 100% due to missing values

### ***Teachers' attitudes towards fruit and vegetable promoting activities at school***

As shown in Table 9, there were no significant changes in teachers' overall attitudes towards F&V promotion, with very positive attitudes shown in both surveys. However, when considering only the "strong" attitudes, there were suggestions of changes in the desired directions, although again not statistically significant due to the small number of teachers surveyed:

- 51% of teachers at baseline and 62% at post-test strongly agreed with "I'm motivated to teach children to eat plenty of fruit and vegetables".
- 7% of teachers at baseline and 16% at post-test strongly disagreed with "Encouraging children to eat fruit and vegetables is a family, not a school, responsibility".
- 27% of teachers at baseline and 34% at post-test strongly agreed with "Children who eat plenty of fruit and vegetables behave better in class".

**Table 9: Teachers' attitudes towards fruit and vegetable promotion in schools**

Statement	% of teachers			
	Agree / strongly agree		Disagree / strongly disagree	
	Baseline (n=71)	Post-test (n=61)	Baseline (n=71)	Post-test (n=61)
I'm motivated to teach children to eat plenty of fruit and vegetables	99	95	1	3
I'm irritated about Health Dept agendas in the school environment	8	2	86	95
Encouraging children to eat fruit and vegetables is a family, not a school, responsibility	31	31	51	61
Children who eat plenty of fruit and vegetables behave better in class	86	87	3	7
Children's diets have little impact on their academic performance	6	8	94	90

NB: row percentages may not add to 100% due to missing values



### ***Teachers' perceptions of their fruit and vegetable promoting skills and support***

As shown in Table 10, at post-test, teachers' were less likely to feel unsupported and unsure of their ability in promoting F&V to children – although only the former difference was statistically significant due to the small numbers of teachers surveyed. This view is enhanced when considering only the “strong” attitudes:

- 34% of teachers at baseline and 44% at post-test strongly disagreed with “I’m unsure of my ability to teach children to eat plenty of fruit and vegetables”.
- 3% of teachers at baseline and 36% at post-test strongly disagreed with “I get little support from external health professionals to promote fruit and vegetables to children” ( $p < 0.0001$ ).

**Table 10: Teachers' perceptions of their fruit and vegetable promoting skills and support**

Statement	% of teachers			
	Agree / strongly agree		Disagree / strongly disagree	
	Baseline (n=71)	Post-test (n=61)	Baseline (n=71)	Post-test (n=61)
I'm unsure of my ability to teach children to eat plenty of fruit and vegetables	17	8	83	90
I get little support from external health professionals to promote fruit and vegetables to children	80 <sup>a</sup>	6	17 <sup>a</sup>	89

<sup>a</sup> Significantly different between baseline and post-test at  $p < 0.0001$   
 NB: row percentages may not add to 100% due to missing values

### ***Canteens' usage of fruit and vegetable promoting strategies***

As shown in Table 11, more canteens reported using most F&V promoting strategies at post-test than at baseline. However, no significance testing was possible due to the small numbers of canteens. The most popular strategies at post-test were holding promotional days and increasing the range of F&V available. Holding tastings of fruits and fruit-based foods was the only strategy used substantially less at post-test than at baseline. Overall, canteens reported using significantly more F&V promoting strategies at post-test than at baseline (group means: 3.5 vs 6.2 strategies,  $p < 0.025$ )

**Table 11: Canteens' usage of fruit and vegetable promoting strategies**

Fruit and Vegetable Promoting Strategy	% used strategy	
	Baseline (n = 10)	Post-test (n = 9)
Increasing the range of fruit / fruit-based items on menu	40	78
Increasing the range of vegetable / veg-based items on menu	70	78
Holding promotional days for fruit / fruit-based foods	50	100
Holding promotional days for vegetable / veg-based foods	30	100
Lowering prices of fruit / fruit-based foods	40	22
Lowering prices of vegetable / veg-based foods	30	33
Holding tastings of fruit / fruit-based foods	100	44
Holding tastings of vegetable / veg-based foods	10	44
Using attractive displays of fruit / fruit-based foods	60	44
Using attractive displays of vegetable / veg-based foods	10	33
Developing canteen policy about promoting F&V	10	44

## Outcome objectives

### *Children's fruit and vegetable consumption*

As shown in Table 12, there was a significant increase in children's fruit but not their vegetable consumption between the baseline and post-test food records. However, as discussed earlier in this section, given the various statistical difficulties posed by these data, further exploration with more robust techniques is required before any firm conclusions can be drawn.

Table 12: Children's fruit and vegetable intakes

Indicator	Baseline (n=1221)	Post-test (n=1080)	Post-baseline Differences (n=429)
% eaten no <b>fruit</b> <sup>a</sup>	27	22	--
% with adequate <b>fruit</b> intake <sup>b</sup>	52	61	--
Mean <b>fruit</b> intake (150gm serves) <sup>b</sup>	1.083	1.284	+ 0.233
Range of <b>fruit</b> intake (150gm serves)	0 – 10.7	0 – 14.6	-4.1 – +4.3
% eaten no <b>vegetables</b>	15	13	--
% with adequate <b>vegetable</b> intake	30	27	--
Mean <b>vegetable</b> intake (75gm serves)	1.877	1.807	+ 0.117
Range of <b>vegetable</b> intake (75gm serves)	0 – 12.3	0 – 11.2	-7.2 – +8.4
% eaten no <b>F&amp;V</b>	5	4	--
Mean <b>F&amp;V</b> intake (serves, as above)	2.960	3.090	+ 0.35
Range of <b>F&amp;V</b> intake (serves, as above)	0 – 13.3	0 – 15.8	-7.1 – +8.1

<sup>a</sup> Significantly different baseline and post-test at p<0.01 <sup>b</sup> Significantly different baseline and post-test at p<0.0001  
NB: Adequate fruit intake was 1 serve; adequate vegetable intake was 2 serves (Years K-2) or 3 serves (Years 3-6); these "vegetable" figures exclude hot chips and highly processed vegetables

## G. Promotional Material

The resources developed are freely accessible to the public and to other health practitioners. Please see the enclosed CD-ROM or our website ([www.nrahs.nsw.gov.au/population/promotion/tooty\\_fruity](http://www.nrahs.nsw.gov.au/population/promotion/tooty_fruity)) for copies of all the Tooty Fruity Vegie planning, implementation and evaluation materials. A policy and practice booklet titled "Healthy Eating Habits at School" is also included.

## H. Statistics

Relevant statistics are included with the project's results in Section F.

## I, J, K. Financial Statements and Accountant's Report

Are enclosed in the appendix.

## L. Assets Register

All assets (books, manuals, aprons, cooking equipment etc) have been distributed to schools.

## Appendix: Strategy Implementation Index Scores

This table shows how many of the 13 intervention schools implemented each key strategy at each level of REACH, FREQUENCY and QUALITY – during the 2001 (before TFV), 2002 (Year 1 of TFV) and 2003 (Year 2 of TFV) school years.

	Reach (how many)	2001	2002	2003	Frequency (times per year) <sup>a</sup>	2001	2002	2003	Quality (how good)	2001	2002	2003	Plan to do in 2004?	
<b>Classroom-based Strategies</b>														
Classroom F&V activities	No children doing	7	0	0	0 activities	7	0	0	Not done	7	0	0	Yes	10
	About ¼	2	1	0	1-9	3	2	1	PD/H/PE material only	3	2	6	No	0
	About ½	3	1	0	10-19	1	1	3	PD/H/PE material & 50%+	3	11	7	Maybe	3
	About ¾	0	0	1	20-39	1	4	3						
	About all	1	11	12	40+	1	6	6						
Web sites for students	No children accessed	13	9	8	0 times	13	9	8	Not used	13	9	8	Yes	3
	About ¼	0	1	3	1-9	0	3	2	Accessed only	0	3	4	No	1
	About ½	0	2	2	10-19	0	1	1	Interactive use	0	1	0	Maybe	7
	About ¾	0	1	0	20-39	0	0	1	Interactive and downloading	0	0	1	Missing	2
	About all	0	1	0	40+	0	0	1						
Having F&V breaks in class	No children done	12	7	2	0 fruit breaks	12	7	2	Not done	12	7	2	Yes	11
	About ¼	0	2	2	<40	0	2	1	Adhoc only	0	2	1	No	1
	About ½	0	1	0	40-99	0	1	2	Planned	1	4	10	Maybe	1
	About ¾	0	0	1	100-199	0	0	2						
	About all	1	3	8	200	1	3	6						
Cooking program (Kids in the Kitchen)	No children done	10	0	0	0 classes	10	0	0	Not done	10	0	0	Yes	9
	About ¼	0	1	2	1-2	1	7	6	Watching only	0	0	0	No	0
	About ½	0	1	3	3-9	1	4	2	Some doing	0	0	0	Maybe	4
	About ¾	1	0	0	10-20	1	2	4	All doing (hands on)	3	13	13		
	About all	2	11	8	40	0	0	1						
<b>Family-oriented Strategies</b>														
F&V promoting activities for families at school	No families done	13	0	1	0 activities	13	0	1	Not done	13	0	1	Yes	8
	About ¼	0	5	2	1-2	0	2	1	Watching only	0	0	0	No	1
	About ½	0	2	4	3-5	0	9	5	Watching & tasting	0	10	8	Maybe	4
	About ¾	0	2	0	6-19	0	1	3	Some prepare food	0	3	4		
	About all	0	4	6	20-40	0	1	2	All prepare food	0	0	0		

	Reach (how many)	2001	2002	2003	Frequency (times per year) <sup>a</sup>	2001	2002	2003	Quality (how good)	2001	2002	2003	Plan to do in 2004?	
School calendars including F&V recipes, etc	No families received	12	0	0	0 times	12	0	0	Not done	12	0	0	Yes	2
	About all	1	13	13	1	1	13	13	Done	1	13	13	No	5
F&V promoting articles in school newsletter	No families received	12	0	0	0 articles	12	0	0	Articles not really about F&V	12	0	0	Yes	9
	About all	1	13	13	1-9	0	4	3	Brief/tangential F&V messages	0	1	1	No	0
					10-20	1	5	7	Good promoters of F&V	1	12	12	Maybe	4
					30-40	0	4	3						
<b>School-oriented Strategies</b>														
Growing F&V gardens in school	No children done	10	3	3	0 times	10	3	3	Not done	10	3	3	Yes	8
	About ¼	2	3	3	1-9	1	0	4	Watching only	0	0	0	No	1
	About ½	0	4	2	10-20	0	4	3	Some doing	1	3	3	Maybe	4
	About all	1	3	5	21-50	2	5	3	All doing (hands on)	2	7	7		
Giving feedback about F&V in lunchboxes	No children received	9	1	2	0 times	9	1	2	No / negative feedback only	9	1	2	Yes	8
	About ¼	2	5	4	1-10	2	3	5	Acknowledge F&V only	1	3	3	No	2
	About ½	1	3	0	20-40	1	5	5	Acknowledge and praise F&V	2	9	8	Maybe	3
	About ¾	0	1	2	50-100	0	3	0	Missing	1	0	0		
	About all	1	3	5	200 missing	0 1	1 0	1 0						
Visits to F&V growers / markets	No children done	11	10	12	0 trips	11	10	12	Not done	11	10	12	Yes	0
	About ¼	2	3	1	1	2	3	1	Watching only	1	1	0	No	6
									Some doing	1	1	1	Maybe	5
									All doing (hands on)	0	1	0	Missing	2
Providing F&V platters / tastings	No children done	10	2	2	0 times	10	2	2	0 points <sup>b</sup>	11	2	2	Yes	10
	About ¼	0	1	0	1-2	1	3	0	1 point	2	3	2	No	1
	About ½	1	1	1	3-10	1	6	8	2 points	0	6	5	Maybe	1
	About ¾	0	1	2	20-40	0	1	2	3 points	0	2	4	Missing	1
	About all	2	8	8	200	1	1	1						
Having healthy breakfast program at school (incl. F&V)	No children done	11	10	9	0 times	11	10	9	0 points <sup>c</sup>	11	10	9	Yes	4
	About ¼	1	1	0	1-2	1	0	2	1 point	1	1	0	No	5
	About ½	1	2	2	30	0	1	0	2 points	1	2	2	Maybe	2
	About ¾	0	0	2	200	1	2	2	3 points	0	0	2	Missing	2

	Reach (how many)	2001	2002	2003	Frequency (times per year) <sup>a</sup>	2001	2002	2003	Quality (how good)	2001	2002	2003	Plan to do in 2004?	
Healthy nutrition policies (incl. F&V) incorporated into school plans	No families exposed	12	9	4	0 times	12	9	4	0 points <sup>d</sup>	12	9	4	Yes	7
	About ½	0	0	1	1	1	4	7	1-2 points	1	3	1	No	2
	About ¾	0	0	1	2	0	0	2	3-4 points	0	0	4	Maybe	3
	About all	1	4	7					5-6 points	0	1	4	Missing	1
Having a Project Management Team	No PMT	12	0	0	0 meetings	12	0	0	No PMT	12	0	0	Yes	7
	One member only	0	0	0	3-4	1	10	9	Low overall functioning	0	0	1	No	1
	2-3 members	1	13	13	5-8	0	3	2	Moderate	0	2	3	Maybe	4
					15	0	0	1	High	1	11	9	Missing	1
<b>Canteen-oriented Strategies</b>														
Canteen a member of NSW School Canteen Association	No canteen	3	3	3	No canteen	3	3	3	No canteen	3	3	3	No canteen	3
	Not a member	6	6	6	0	6	6	6	Not member or accredited	6	6	6	Yes	3
	All children exposed	4	4	4	80	1	0	0	Member but not accredited	4	4	3	No	2
					120	2	3	2	Accredited – Merit level	0	0	0	Maybe	4
					200	1	1	2	Accredited – Bronze/ silver	0	0	1	Missing	1
								Accredited – Gold	0	0	0			
Canteen promotions of F&V	No canteen	3	3	3	No canteen	3	3	3	No canteen	3	3	3	No canteen	3
	No children exposed	3	0	1	0 promotions	3	0	1	Not done	3	0	1	Yes	5
	About ¼	2	1	1	1-4	5	6	6	Small / tentative promotion	4	2	3	No	0
	About ½	0	1	0	5-10	1	0	1	Good promo, well implemented	3	8	6	Maybe	4
	About ¾	1	2	1	20-30	1	2	1					Missing	1
About all	4	6	7	40	0	2	1							
Networking with other profitable, health-oriented canteens	No canteen	3	3	3	No canteen	3	3	3	No canteen	3	3	3	No canteen	3
	No workers network	7	6	6	0 times	7	6	6	No contact	7	6	6	Yes	3
	About ¼	3	3	3	1-2	2	3	2	Talked only	0	2	1	No	4
	About ½	0	0	1	3-5	1	0	2	Got ideas	2	0	2	Maybe	2
About all	0	4	0	10	0	1	0	Implemented ideas	1	2	1	Missing	1	
Reviewing F&V content / price on menus	No canteen	3	3	3	No canteen	3	3	3	No canteen	3	3	3	No canteen	3
	No children exposed	8	3	5	0 reviews	8	3	5	0 points <sup>e</sup>	8	3	5	Yes	4
	About ½	0	2	0	1	2	6	1	1 point	2	5	1	No	1
	About ¾	0	0	1	2	0	1	1	2 points	0	1	2	Maybe	4
About all	2	5	4	3-4	0	0	3	3 points	0	1	2	Missing	1	

	Reach (how many)	2001	2002	2003	Frequency (times per year) <sup>a</sup>	2001	2002	2003	Quality (how good)	2001	2002	2003	Plan to do in 2004?	
F&V promotions on kids' lunchbags	No canteen	3	3	3	No canteen	3	3	3	No canteen	3	3	3	No canteen	3
	No children exposed	10	10	9	0 times	10	10	9	Not done	10	10	9	Yes	1
	About ¼	0	0	1	3	0	0	1	Promoting Fruit only	0	0	0	No	5
									Promoting Veg only	0	0	0	Maybe	4
									Promoting F&V	0	0	1		
<b>Partnership-oriented Strategies</b>														
Involving local F&V shops as sponsors in school	No shops involved	12	5	4	0 events	12	5	4	No contact	12	5	4	Yes	4
	1	1	4	5	1-4	0	3	3	F&V donated only	1	4	5	No	1
	2	0	4	4	5-10	1	1	1	Visit school to talk about F&V	0	0	0	Maybe	7
					20-40	0	2	5	Offer F&V discount to families	0	4	4	Missing	1
					80-100	0	2	0						
Involving local F&V growers as sponsors in school	No growers involved	13	11	13	0 events	13	11	13	No contact	13	11	13	Yes	0
	1	0	1	0	6	0	1	0	F&V donated only	0	2	0	No	6
	3	0	1	0	20	0	1	0	Visit school to talk about F&V	0	0	0	Maybe	4
									Kids visit grower's farm	0	0	0	Missing	3
Involving local health & education professionals in promoting F&V in school	No profs involved	13	7	10	0 events	13	7	10	No contact	13	7	10	Yes	2
	1	0	4	1	1	0	1	1	Advice only with F&V activity	0	0	0	No	2
	2	0	2	1	2-4	0	4	1	Conducting F&V activity	0	2	0	Maybe	5
	3	0	0	1	5-6	0	1	1	Plan & conduct F&V activity	0	4	3	Missing	4

<sup>a</sup> 4 times = once per term, 40 times = weekly, 200 times = daily

<sup>b</sup> Given a point each for: Vegetables included, Popular with kids, F&V info given with F&V (**maximum = 3 points**)

<sup>c</sup> Given a point each for: Variety of F items included, Variety of V items included, Popular with kids, F&V info given with F&V (**maximum = 4 points**)

<sup>d</sup> Given a point each for: Ensure F&V on canteen menu, Restrict junk foods on menu, Promote F&V price subsidy, Promote healthy fundraisers, Ensure adequate eating time in breaks, Give healthy lunch info to new parents (**maximum = 6 points**)

<sup>e</sup> Given a point each for: More F&V on menu, Cheaper F&V, Hidden F&V (**maximum = 3 points**)