TOOTY FRUITY VEGIE PROJECT

PROCESS & IMPACT EVALUATION REPORT

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EXECUTIVE SUMMARY

Aims
This report describes the results and implications of a comprehensive process and impact evaluation of the Tooty Fruity Vegie (TFV) project, 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 New South Wales. The project aimed to achieve this increase by improving:

- Children's fruit and vegetable knowledge, attitudes, access and preparation skills.
- Parents' fruit and vegetable knowledge and preparation skills and their involvement in fruit and vegetable promoting activities in the schools and elsewhere.
- Teachers' attitudes towards teaching about fruits and vegetables in schools and their skills and confidence in relation to teaching about fruits and vegetables.

Methods

Intervention
In late 1998, 10 volunteer primary schools (1174 students in total) were recruited as intervention schools and another six local primary schools (992 students in total) were recruited to act as demographically and geographically matched controls. The project, which ran during the 1999 and 2000 school years, promoted a whole-of-school approach to implementing a range of classroom, canteen, family-oriented and community-based strategies promoting fruits and vegetables. The strategies were developed from the evidence available at the time and were designed to create a supportive environment by developing, and helping schools to implement, fruit and vegetable promoting educational resources and activities for children, their parents, teachers, schools, school canteens and the broader community.

In order to maximise schools’ ownership and the project’s sustainability, schools were encouraged to form Project Management Teams to oversee the project’s implementation in their school. Membership varied between schools but could include teacher, principal, child, parent, canteen, community nutritionist and Aboriginal Education Assistant representatives. These teams, assisted by a TFV Project Officer, were responsible for choosing the TFV strategies to be implemented in their school, organising their implementation, monitoring the response to them and modifying them as necessary. They also often initiated new, innovative strategies they found or developed themselves. Small grants of AU$270 to AU$750 per year were made available to schools, based on need, to assist with implementing TFV strategies. In line with the aim of creating a self-sustaining program, all intervention schools were encouraged and helped to recruit and train volunteers (mainly parents) to help with implementing many TFV strategies. The TFV Project Officers ensured information about successful strategies were communicated between intervention schools.
**Evaluation**

The TFV project had a comprehensive process, impact and outcome evaluation plan, of which only the first two are presented here. The latter involved prospective 24-hour food records at the beginning, middle and end of the project, are currently being analysed and will be reported separately.

In order to evaluate the quality of the project’s implementation and its success in relation to its broad range of impact indicators, we drafted, pilot-tested, revised and administered surveys to all the children, parents, teachers, principals, volunteers and other health professionals involved in or exposed to the TFV project. In addition, a “Participation Index” was completed by each intervention school’s Project Management Team to indicate the reach, frequency and quality of implementation for each key TFV strategy.

**Results**

Response to this process and impact evaluation was generally good, with completed surveys received from 613 parents (59%), 392 children (65%), 50 teachers (81%), 36 volunteers (34%) all 10 intervention school principals and all three other health professionals invited.

The results showed that the TFV project was well implemented, reached the vast majority of all target groups and was overwhelmingly positively received by them. The project enhanced the quality, diversity and frequency of classroom fruit and vegetable promoting activities, substantially increasing children’s involvement in and enjoyment of such activities. It also increased the amount, range and utilisation of fruit and vegetable promoting materials distributed to parents, as well as increasing parental interest and involvement in and enjoyment of fruit and vegetable promoting activities in schools, and beyond. The fun, practical and hands-on nature of many of the TFV strategies, and the parental involvement, seem to have been key factors in the project’s success.

The TFV project improved children’s fruit and vegetable related knowledge, attitudes and preparation skills and their access to fruits and vegetables at home and in school settings and may have improved their fruit and vegetable eating intentions and actions. Analyses in progress on 24-hour food record surveys will provide more definitive evidence regarding the project’s impact on fruit and vegetable intake. Attitudes and home access to fruits and vegetables appear to have improved more for girls and younger children than for boys and older children. Similarly, younger children reported more impact on their fruit and vegetable eating intentions and actions.
Although not affecting teachers’ knowledge of daily recommended fruit and vegetable intakes, the TFV project may have promoted more positive attitudes towards school-based fruit and vegetable promotions and improved teachers’ perceived skills and support for doing them.

Although nine of the 10 intervention schools will be continuing various TFV activities, they will likely need to have an active recruitment system to increase the proportion of parents involved in order to achieve long term sustainability. This may be achieved by encouraging current volunteers to share their positive experiences of the TFV project, offering transport and childcare and using more incentives. Similarly, some more thought is needed about how to motivate and minimise the burden on TFV Project Management Teams in schools and ensuring the project remains sufficiently relevant to enable other health professionals to participate.

Key lessons learned from the TFV project

• Support from principals and the whole-of-school approach were important in enhancing the project's implementation. The current project performed well in this area and similar techniques will be used in future implementations.

• Adequate planning, training and support for TFV activities was essential in establishing the project in schools. The current project performed well in this area.

• Providing teaching resources addressing curriculum outcome statements was important in addressing the competition with other topics for limited curriculum space. The current project performed well in this area and existing materials need only be professionally produced before future implementations. However, utilisation rates could be improved further by providing copies of all TFV resource materials to all teachers.

• Good communication with schools and support (eg: cooking equipment, teaching resources) from the TFV staff was important in achieving the overwhelmingly positive attitudes towards the project among teachers and principals. The current project performed well in this area and no changes are needed before future implementations.

• Having school TFV Project Management Teams was important for coordinating and sustaining TFV activities. Broad representation on the TFV Project Management Teams was important in maximising the range of TFV activities and minimising the burden on individual members. Some more thought is needed about how to best achieve this, in a sustainable way, before future implementations.

• Committed parent volunteers were an essential part of implementing many key TFV strategies. Although the TFV project increased parental involvement in school-based fruit and vegetable activities, there was still much room for further improvement. Better scheduling of events, improved training, more incentives and offering transport and childcare were suggestions for increasing parental involvement and should be considered further before future implementations. More efforts to improve networking among volunteers from different schools could also improve volunteer numbers and satisfaction.
• TFV activities scheduled to coincide with other school events (eg: sports days) were much better attended than those run alone. Therefore, for maximum impact, future implementations should concentrate on co-scheduling TFV activities with existing school events.

• The fun and hands-on nature of many TFV activities, such as the Kids in the Kitchen cooking classes, food tastings and gardening was important in maximising children's, parents’, volunteers’ and teachers’ enjoyment of and satisfaction with the project. Future implementations should ensure an adequate level of these interactive activities.

• Fruit and vegetable tastings, cooking lessons, gardening and videos and visits to fruit and vegetable growers and markets were consistently considered the most successful activities for improving children's fruit and vegetable knowledge, attitudes and skills and for meeting teachers' curriculum goals. Their fun and practical nature and parental involvement were viewed as key factors in these activities' success. Future implementations should ensure that these activities are included as core components.

• The Kids in the Kitchen cookbook and manual, the TFV “More Teacher Resources for Classroom Activities” folder and the TFV “Gardening Kit” were the most useful classroom resources for the teachers. Future implementations should ensure that these resources are included as core components and are available from the beginning of the project.