



Department of
Education
and Training

2006 REVIEW OF THE NUTRITIONAL VALUE OF FOOD SOLD IN SCHOOL CANTEENS:

FINAL REPORT

AUGUST 2006

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EXECUTIVE SUMMARY and RECOMMENDATIONS

This report details findings and recommendations from the 2006 Western Australian Review of the Nutritional Value of Food Sold in School Canteens. The Review comprised a survey and several consultative forums. The following recommendations are made by an Expert Reference Group of stakeholders in respect to a nutritional policy for all public schools:

1 Ensuring a Balanced Menu Using a “Traffic Light” System

School canteens are to support healthy eating by:

- having available every day and promoting a wide range of the foods that should comprise the majority of a healthy diet (“green”);
- having available only sometimes, choosing healthier alternatives and avoiding large serving sizes of foods that should be eaten in moderation (“amber”); and
- not making available foods that do not meet specified minimum nutrient criteria (“red”).

2 Minimum Standards

All processed food and drink sold in school canteens must meet a minimum nutrient standard.

3 Scope of the Policy

The nutritional policy for school canteens should apply to all operators of a canteen or tuckshop on public school sites including P&C Associations, external contractors and local caterers / shops that provide a food service to the school.

4 Whole School Approach

The nutritional policy should extend to areas in the school where the principal is directly responsible for the supply of food and drinks e.g. classroom rewards, school camps, excursions.

5 The Role of the School Canteen

The role of the school canteen should be clearly stated as being to provide a food service to students and staff that meets their nutritional needs, promotes healthy food, is part of a whole school approach, and is affordable and financially sustainable. Profit making is a secondary objective and should be achieved through the sale of healthy foods.

6 Implementation of the Changes

Implementation of the changes will commence at the beginning of the 2007 school year with the changes in place by the end of term 2 under a model of continuous improvement with clearly articulated levels of achievement.

7 Reporting on Progress

Schools are to demonstrate compliance through the principal when required by district directors, and report annually to parents via the school newsletter.

8 Support and Assistance for Canteens

Support and assistance should be provided to canteens and schools through:

- continued funding to support school canteens through training and mentoring for canteen staff;
- increased information to encourage participation for example through newsletters, website and/or helplines; initiation of combined “buying groups”;
- information/awareness and education resources for parents, teaching staff and health promotion officers; and
- coordination with school physical activity strategies and health sector health promotion services.

1. BACKGROUND

In March 2006 the Premier of Western Australia and the Minister for Education and Training announced a review of the nutritional value of food sold in WA school canteens. The purpose of the review was to gain an accurate understanding of what is currently being sold in school canteens and to develop policy and strategies to ensure all canteens support the development of healthy eating by students.

Childhood obesity is now recognised as a world wide epidemic. The rates of overweight and obesity in Western Australian children and young people having tripled in the last twenty years since 1985, with a quarter of boys and a third of girls aged 7-15 years overweight or obese in 2003¹. This is a serious issue as excess weight and obesity carries greater risk of a number of immediate and long-term health and behavioural problems. Weight gain is usually the result of eating too much food, or the wrong type of food, combined with doing too little physical activity.

Mounting evidence and heightened media coverage, has resulted in increasing calls by the community for schools to share the responsibility of combating this epidemic. Schools and their canteens have been identified as important living environments that can support healthy eating and physical activity².

School canteens in Western Australia have evolved from parent groups and volunteers responding to the need to provide an onsite food service for students. Currently, under the *School Education Act 1999*, a canteen may be operated at the school by the school Parents and Citizens (P&C) Association, an incorporated School Council, the principal using volunteers only, or by an external provider under a contract managed by the principal.

The school canteen can reinforce nutrition messages being taught in the classroom by modelling healthier food and drink choices that are tasty, interesting and affordable. This has the potential to influence food choices by students at school and in the wider community, and help to equip students with the knowledge to continue to make healthy choices throughout their adult lives.

Children and adolescents vary in the amount they rely on school canteens but because canteens are an integral part of schools, they also have an important role in setting a standard for healthy eating for the whole school community.

¹ Hands, B., Parker, H., Glasson, C., Brinkman, S. & Read, H. (2004) *Physical Activity and Nutrition Levels in Western Australian Children and Adolescents: Report*. Perth, Western Australia: Western Australian Government.

²National Obesity Taskforce, Department of Health and Ageing. (2003). *Healthy Weight 2008 – The national action agenda for children and young people and their families*. Canberra, ACT: Commonwealth of Australia.

2. REVIEW PROCESS

The Western Australian Department of Education and Training established a Project Team within the Strategic Policy and Planning Branch to conduct the review between March and August 2006. There were two main components to the review. The first was a survey of all WA schools regarding the types and quantities of food and drinks sold in the canteen. The survey was conducted in May 2006 and the full set of findings is available in Part C of this report.

The survey

In general, it was found that while many schools provide a range of healthy options (e.g. 80% of schools have sandwiches and rolls available every day), the most frequently sold items were foods that tend to be less healthy e.g. pies, pasties and sausage rolls; ice-creams and icy-poles; sweet muffins; ovenable fish/chicken portions.

While many schools have already restricted the most unhealthy food and drinks such as soft drinks, hot chips or wedges, potato crisps and confectionery, some of these items are amongst the top sellers for certain school types (e.g. soft drinks in District High Schools and Senior High Schools). Further survey results are discussed throughout this report and the implications for a nutritional policy are examined.

Stakeholder consultation

The second component of the review was stakeholder consultation conducted through a series of focus groups and the establishment of an Expert Reference Group.

Five focus groups were conducted in the metropolitan area to consult separately with each of the following stakeholder groups: food industry representatives; the health sector; canteen supervisors and staff; parents including Parent and Citizens Association members; and education sector representatives. Four regional focus groups were conducted that brought the different stakeholder groups in each region together (see Appendix 1 for a list of organisations represented at the focus group consultations).

An Expert Reference Group was established, the members of which were drawn from key stakeholder organisations as well as each of the five metropolitan focus groups (see Appendix 2 for a list of Expert Reference Group members and Terms of Reference). The purpose of the Expert Reference Group was to consider and provide advice to the Minister for Education and Training regarding policy for healthy nutrition in school canteens.

The recommendations that follow in 3. Part A: Findings and Recommendations for Policy were drawn from the Expert Reference Group discussions and information gathered from the focus groups as well as the Project Team's research as part of the review.

3. PART A: FINDINGS AND RECOMMENDATIONS FOR POLICY

3.1 Minimum standard for all food and drinks in canteens

National Obesity Taskforce

A key action identified by the National Obesity Taskforce under *Healthy Weight 2008* – *The National Action Agenda for Children and Young People* is:

‘Promoting widely the implementation of the National Health and Medical Research Council’s Dietary Guidelines for Children and Adolescents and the Australian Guide to Healthy Eating by introducing standards for school canteens, vending machines, fund-raising, sponsorships, special events and by strengthening nutrition education in the curriculum’. (Emphasis added).

Introducing a standard

Currently in Western Australia, there is no mandatory policy for school canteens. Many of the people consulted during the Review were in favour of a mandatory policy and stated this would assist in the changes planned or already made to improve canteen menus. It was suggested that mandating a nutritional policy will overcome resistance to healthier food, make it equitable as all canteens had to adhere to the same nutritional standards, and ensure implementation, in contrast to guidelines which would be viewed as optional alternatives.

Minimum nutritional criteria could be used to define a category of foods that are not to be sold in school canteens. A “traffic light” system has often been used in other states to communicate nutritional policy. Under such a system, foods that are “off the menu” are portrayed as “RED” foods.

Canteen foods ‘Off the menu’

A key issue is how to categorise foods as being “RED” or “off the menu”. The WA School Canteen Association (WASCA) Star Choice system assesses all products against the minimum nutritional criteria for the food type. Appendix 7 has further details of the system as it currently operates and how it may be adapted to suit a whole system approach.

Under Star Choice, foods are registered which are lower in fat, sugar, salt (and higher in fibre and calcium where relevant) than other products of that food type available in the market. There are 9 categories of foods and 61 sub-categories, each with its own set of nutrient criteria. All foods that are registered or capable of being registered are recommended.

Similarly, the *Australian Guide to Healthy Eating* (AGTHE) specifically identifies a number of ‘extra’ foods that are recommended to be eaten only sometimes or in small amounts. These foods are not essential to provide the body’s nutrients and/or contain too much fat, salt and sugars (e.g. soft drinks; high fat snack items such as crisps, pies, pasties, sausage rolls, lollies and chocolate). They are termed “RED” and in some jurisdictions are completely ‘off the menu’ in terms of availability.

FOCiS, formerly known as the Federation of Canteens in Schools, is the professional body representing canteens nationally and has members from state and territory canteen associations. FOCiS coordinates a national register of products that meet the *Dietary Guidelines for Children and Adolescents in Australia* (2003). FOCiS has developed nutrient criteria where registered products must not exceed levels of energy, total fat, saturated fat, sodium and sugar provided in the criteria.

More recently, New South Wales and Queensland have adopted their own nutrient criteria. During the consultations the food industry indicated a strong preference for nationally consistent criteria.

National Healthy School Canteen Framework

The issue of inconsistency between States is expected to be addressed by a National Healthy School Canteen Framework, is soon to be developed by Australian state and federal governments.

In the meantime canteens and food companies that have operated in WA are familiar with the Star Choice system and standards. Canteens are able to access all children's most favoured foods in healthier versions (pastries, crisps, confectionary and carbonated drink and juices) through the Star Choice Buyer's Guide. Accordingly the criteria currently in use in WA can be used to define a group of foods that are not to be sold at all in school canteens (see Appendix 3 Food Categories – Rationale, examples and minimum nutrient criteria, for proposed list of "RED" foods and the minimum nutrient criteria).

Frequency of food availability

A second issue is how frequently foods not meeting minimum nutrient criteria are to be supplied through school canteens. In WA, WASCA recommend that non-nutritious foods (those that do not meet the criteria for Star Choice registration) are not to be sold at all, because students have ample opportunity to eat these foods outside school under the supervision of their parents.

The survey showed that many school canteens in WA have already excluded the most unhealthy food and drinks, for instance, regular soft drinks (only 7% of canteens have available every day); hot chips or wedges (11%); potato crisps (8%); and confectionery (27%). This is probably due to the StarCAP program being well-known in WA. However, there is no single standard and there are discernible differences between different school types. In particular, soft drinks are high on the list of most commonly sold items for District High Schools (DHSs) and Senior High Schools (SHSs); and confectionery was high on the list for primary schools and SHSs.

During the consultations it became clear that there was a preference for unhealthy foods to be replaced with healthy variants rather than foods being "banned". For example a pie can be registered if it meets the criteria. The concerns were that such an approach may elevate the desirability of the item for students, that it may work against students learning important self-management skills, and that it may detract from the 'balanced diet' message.

The identification of a set of minimum nutritional standards for school canteen food in Western Australia was widely seen as the best means by which to deal with food and drink that do not meet nutrient criteria. The implementation timeframe for a nutritional policy in WA schools based on nutritional standards is discussed further at 4.2 Implementation timeframe. The list of foods not to be sold at all in school canteens is set out in Appendix 3 Food Categories – Rationale, examples and minimum nutrient criteria.

3.2 Ensuring a balanced menu

The prescription of minimum standards for all food and drinks provided in school canteens will not on its own ensure that students make healthy choices. The provision of a nutritious and balanced menu from which to make selection is essential if eating practices are to change.

National guidelines - healthy diet

National *Dietary Guidelines for Children and Adolescents in Australia* and *The Australian Guide to Healthy Eating* (AGTHE) underlie many of the nutritional school canteen policies in Australia.

The National Health and Medical Research Council (NHMRC) has published the *Dietary Guidelines for Children and Adolescents in Australia* (Appendix 4). These guidelines provide recommendations for healthy eating not only to reduce the risk of diet-related disease, but also to improve the community's health and wellbeing. Overall, for good health, school-aged children need to drink plenty of water and eat plenty of fruit, vegetables, legumes and cereals; adequate amounts of lean meat and low fat milk products; and, importantly, choose foods containing less fat, less saturated fat, less sugar and less salt.

As the Review made clear, however, a nutritional policy for the supply of food and drinks in school canteens must also provide detail on the 'healthiness' of particular foods. Many of those consulted pointed out that dietary guidelines are not useful in this regard as they refer instead to the healthiness of the overall diet of the individual.

National guidelines - healthy foods

Under AGTHE (Appendix 5) dietary guidelines are translated into recommendations for the particular foods to be eaten in order to promote health. A plate model is used where the plate is divided into different sized segments, to indicate the proportions of food from each of the five food groups that should be eaten for good health. For example, about two-thirds of a person's food intake should come from two major food groups – the breads, cereals, rice, pasta and noodles group and the vegetables and legumes group. Foods are grouped together because they share a similar range of nutrients.

Balanced approach

The Review confirmed that school canteen food and drink supply should strive to combine a whole food, 'balanced meal' approach that reflects the AGTHE as well as the minimum nutrient values. A key message of the AGTHE, to enjoy a variety of foods every day, was supported in several of the consultation meetings where the importance of ensuring and retaining enjoyment in healthy food was urged. 'Enjoy' was suggested as an opening statement to any policy to emphasise what eating healthy food is about.

Healthy canteen choices

Based on this advice and the dietary guidelines, it is proposed that foods that meet the Star Choice Standards be grouped into two categories for ease of recognition.

- Foods to 'fill the menu' ('GREEN') and
- Foods to 'be selected carefully' ('AMBER')

This categorisation will assist with menu planning and be a reminder to students of the need to select more frequently from the ('GREEN') group of foods. It also builds on the advice through the voluntary StarCap system which encouraged careful menu planning with the majority of foods coming from the healthier group.

It was also noted by the Expert Group that judgment needs to be exercised over such issues such as frequency of availability and serving size.

Foods 'Off the menu' ('RED')

Some foods are not positioned on the AGTHE plate but sit outside it. These are regarded as 'extra' foods because they are not essential to provide the nutrients needed for a healthy diet. Examples include biscuits, cakes, desserts, pastries, soft drinks, high fat snack items such as crisps, pies, pasties, sausage rolls and other takeaways, lollies and chocolates. Most of these foods are high in fat (particularly saturated fat), and/or salt and/or added sugar and for these reason the advice is to limit intake of these foods. These are the foods that do not generally meet the Star Choice standards discussed in the previous section.

Issues

Some P&C Association members and canteen managers expressed reservations about the introduction of additional requirements to limit some foods because such requirements were perceived as unclear or unachievable. For example, it was reported that the range of Star Choice registered products is limited in rural and regional areas, so if an 'AMBER' category is specified and canteens are to use only the healthier versions of foods then some schools may not be able to access these products and hence could fail to meet the requirements. The Expert Reference Group recognised this as an important implementation issue that needed to be addressed in a progressive fashion, for instance by examining where school canteens' purchasing powers can be combined in clusters and regions (see 4.4 Support and assistance for policy implementation).

The set of minimum nutrient criteria to define what is to be selected carefully ("AMBER") as opposed to being off the menu ("RED") has been discussed earlier in recommendation 3.1.

Availability of food types linked to allergic reaction also needs to be addressed. It was recommended that nutritional policy for school canteens take into account the Department of Education and Training's policy and advice regarding food allergies, especially anaphylaxis. A strong link must be made to the Department's *Student Health Care* policy which provides the definitive policy requirements and supporting information for how public schools, including canteens, must manage food supply when an enrolled student has a known, potentially fatal, allergy.

The proposed food categories, examples and associated minimum nutrient criteria are described in Appendix 3 Food Categories – Rationale, examples and minimum nutrient criteria.

3.3 Application of the policy to different food service models

Food service delivery

There are a variety of ways in which food services are currently provided in Western Australian schools. The survey found that of the schools that have a food service (12% do not), 66% are school canteens operated by the Parents and Citizens Association (P&C), 21% are canteens operated by the school, 11% are a food service provided through a retail outlet, and 3% of school food services are operated by an external organisation. The majority of public school canteens are operated by the P&C (80%), whereas Catholic schools predominantly run school-operated canteens (76%). Independent schools do not demonstrate a significant preference for either model whether school-operated (49%) or P&C-operated (33%). District High Schools show a strong preference for providing food through a retail outlet, and Senior High Schools show a small but significant tendency towards contracting external organisations to operate their canteen.

Few canteens or food services provided at public schools are provided by staff employed by the Department of Education and Training. The majority are provided by external and independent bodies either under contractual conditions or with conditional approval by the Director General (as in the case of P&Cs). Therefore, a nutritional policy for school canteens operating at a public school needs to be negotiated as part of new or existing contracts or provided as a condition under which the P&C operates the school canteen.

Local retail outlets

Many of those consulted in regional areas suggested that a nutritional policy for school canteens should also apply to regular food services provided by local retail outlets. For numbers of regional schools the service provided by the retail outlet is the only source of food and drinks for students while they are at school. In other schools the canteen may operate a few days a week and a food service by the local shop is used on the other days. In both cases the school canteen and food service are supplying food and drink to students on a regular basis. Other sources of regular food and drink supply to students are “breakfast programs or clubs” (in 15% of schools as shown by the survey) and vending machines that can be accessed by students.

Country initiatives

The WA Country Health Service advised that local caterers were happy to implement healthier menus for students because they wanted to support school policy.

The *CaterWise* program is one example of a successful initiative. It was piloted in 2006 by the WA Country Health Service to assist schools in the Wheatbelt region relying on food services provided by local shops (such as roadhouses, hotels, delis or in some cases even the post office). The program uses the Star Canteen Accreditation Program (StarCAP) guidelines to improve the healthiness of the food services. School staff, parents and the shop owners receive training, resources and follow-up support to make menu changes. The program has been well-received by the pilot schools and their local caterers.

3.4 Other areas and times where food and drink are supplied at school

Classroom or other activities

Currently, there are no guidelines for the nutritional standard of food supplied during classroom or learning activities or at other times in the school such as for fundraising, social events such as school discos, and school excursions. Anecdotal reports were provided during the consultations that confectionery was sometimes provided as an in-class treat and in one case, soft drink was regularly provided during a homework program. In addition, it emerged that fundraising using confectionery is a common practice in WA schools.

Other States

In introducing nutritional policy for school canteens, some other States have adopted a whole school approach so that what is done in classrooms, on excursions and at school events is compatible. This is consistent with a health promoting schools model where curriculum, teaching and learning; school organisation, ethos and the social and physical environment; and the relationships between school, home and the community are all key elements of health promotion at the school.

Fundraising

During the consultations some parents and some members of the WA Councils of State School Organisations (WACSSO) have indicated that they do not wish to have any restrictions placed on fundraising. Some of the reasons were that: fundraising events generally occur only occasionally, the money raised is for the school and students and is not for profit, fundraisers target students' families and the local community rather than students themselves and other healthier fundraisers require greater numbers of volunteers than are available. In addition, there was a view that it would be P&C activities that were being primarily targeted and curtailed by a nutritional policy.

Whole school approach

Other parents were equally convinced that schools must not give out inconsistent messages, especially in relation to classroom rewards. It should be noted that other States and health and nutrition organisations in Australia and around the world have developed a wide range of successful alternative, healthy fundraising ideas through numerous websites.

The vast majority of canteen staff consulted expressed a desire to see any new nutritional policy for canteens supported by a whole school approach. There were a minority who expressed a tolerance for occasional instances where unhealthy foods not sold through the canteen could be provided to students.

A whole school approach could be recognised in policy so that events and activities not organised by the school are beyond the scope of the policy while affirming health as a priority to guide school-based policies and in-school activities.

4. PART B: IMPLEMENTATION STRATEGY

A number of implementation issues and suggested solutions were raised during the consultation forums and by the Expert Reference Group.

4.1 Role of the school canteen

Governance

The recent survey showed that 80% of public school canteens are operated by the school P&C Association, a small number contract out the operation, and 11% of schools have a food service provided by a local shop. The implementation of a healthy approach to food and drinks sold in public school canteens has been decided locally.

Health promoting schools

It was generally acknowledged during the consultations that school canteens have an important responsibility to ensure that the food they provide is healthy.

Internationally, the development of healthy school canteens has been set within the broader context of the 'health promoting school' (HPS). In the HPS model, healthy school canteens are regarded as a health intervention that addresses both healthy eating and overweight and obesity. The framework consists of three elements:

- *curriculum, teaching and learning* (content, pedagogy, resources and outcomes);
- *school organisation, ethos and environment* (focuses on school culture, attitudes and values, policies and practices, extracurricular activities and the social and physical environment); and
- *partnerships and services* (concerned with the relationships between school, home and the community).

Links to curriculum

The *Curriculum Framework* in Western Australia includes as an overarching outcome: "Students value and implement practices that promote personal growth and well-being." Within the Health and Physical Education learning area, a key outcome for all students is to "know and understand health and physical activity concepts that enable informed decisions for a healthy, active lifestyle." These are the broad aims of school curriculum in Western Australia that are part of the context in which school canteens operate.

Support from WACSSO

The role of school canteens in supporting healthy eating is recognised by the peak representative body for P&C Associations, the Western Australian Council of State School Organisations (WACSSO). In its support materials that provide advice and guidance for P&Cs operating a school canteen, there is an example canteen policy which states that the aim of a school canteen is to "provide an enjoyable, nutritious and attractively presented selection of food and drink at reasonable prices". Furthermore, one of the outcomes for a school canteen is to "help reduce health risk factors by encouraging the development of good eating habits consistent with the Dietary Guidelines for Children and Adolescents".

Canteen fundraising

One contentious aspect to the role of school canteens often raised in the context of ensuring healthy standards is fundraising. For example, WACSSO also states in its support materials, that one outcome of school canteens is to provide a financial contribution towards resources for all students in the school.

Many people consulted during the review offered the view that fundraising was not appropriate as the primary or key purpose of school canteens (one participant described the idea as “outdated”).

Canteen profitability

In the survey results 86% of canteens stated that their school did not set a percentage target for profits. However, only 74% of canteens reported a net profit in 2005 with larger schools more likely to report a net profit.

When this issue has been researched in other States, it has been consistently shown that healthy school canteens are profitable. Most recently in 2005, an evaluation of the NSW Fresh Tastes @ School Strategy³ incorporating over 500 schools, found that 98% had implemented the healthy canteens policy and the majority of those had reported making a profit.

Outside school purchases

Many people consulted raised the issue of students, especially those in secondary school, leaving the grounds with or without permission to purchase food not available in the school canteen. Where school canteens move to offering only healthy choices students will purchase the food elsewhere. This fear may be over-stated as the survey found that 95% of schools that responded did not allow students to go off-campus to purchase food. Nevertheless, the implementation of a nutritional policy in all school canteens may need to be staged in order that canteens have time to promote and build support in the school so that sales are maintained.

Healthy treats

Some parents indicated that they use the school canteen to provide a “treat” to their children and therefore unhealthy “treats” need to be available. However, most were of the view that the canteen must be seen as part of the school. When open it is accessible to all students: those having a treat and those who are filling their essential nutritional needs. WASCA’s position and the majority view expressed during the Review is that canteens can offer healthy treats and students have ample opportunity to consume unhealthy treats outside of school hours.

³ Nutrition and Physical Activity Branch. *NSW Healthy School Canteen Strategy Evaluation Report 2005*. Sydney: NSW Department of Health, 2006.

4.2 Implementation timeframe

Continuous improvement model

Many of the providers consulted reported that they had successfully improved the healthiness of their canteen menu by gradually introducing changes. Less healthy food items were gradually removed and replaced with healthier alternatives of the same food type (e.g. low fat pies and sausage rolls). Many school canteens change their menus twice yearly for summer and winter. In some cases the timeframe for the whole change process has been achieved over three years.

WASCA also encourages a gradual approach in order to ensure sustainability and support for the changes. Suggested techniques include providing an item only at morning recess or lunchtime before it is removed altogether. As with other businesses, change to the menu of school canteens has been found to be more readily accepted with the right promotion and marketing to students and parents. The WASCA Star Canteen Accreditation Program requires at least one special promotion theme day each term (e.g. Heart Week, Fruit 'n' Veg Week). This is also intended to encourage the canteen to provide leadership for healthy eating within the school.

Planning for change

It was pointed out that menu changes involve planning and management of existing stock to limit wastage. In some cases further organisation or sourcing of the supply of healthier products may need to occur if existing suppliers do not carry the preferred items.

The exclusion of food such as soft drinks or confectionery, and the restriction of "AMBER" foods and substitution with "GREEN" foods, will represent change for some types of schools where unhealthy foods are currently high selling items. Schools where soft drinks have been replaced have indicated that, with careful management, profit can be maintained. Support with advice on effective strategies will be important for canteens in making the necessary changes.

Lead-in time for manufacturers

As indicated in Section 3.1 manufacturers are familiar with Star Choice nutrient standards. If there were to be a more national approach in the future, the food manufacturers consulted stated that a lead-in time of at least 12 months was required if changes were to be introduced in the minimum nutrient criteria. The lead-in time would allow for development or re-formulation of products. They also stated a preference for certainty that the criteria would be in place over a period of time (e.g. five years) in order that a return on the research and development investment could be achieved.

A system which allows schools to make continuous improvement across a series of levels of achievement has been recognised as the approach most likely to succeed.

4.3 Monitoring policy compliance

Monitoring compliance with the standards will be an important feature of the new system. Currently, school canteens can volunteer to participate in the WA School Canteen Association's Star Canteen Accreditation Program (StarCAP) where their accreditation level (3, 4 or 5 star) indicates the standards met in training, in linking the school canteen with the school curriculum, in food safety and in the proportion of healthy foods sold. This involves accreditation based on sales records. Unfortunately this is a time consuming process and there have been only 150 out of approximately 700 school canteens that have achieved accreditation since the program began in 1999.

Issues with StarCAP

The majority response from school canteen supervisors who have attended StarCAP training and some who previously participated in StarCAP was that the paperwork required in recording the type and numbers of food items sold was prohibitive. StarCAP accreditation must be evidenced by *records of what was sold each day over three consecutive terms* for 12 months of accreditation. Some school canteen supervisors who were current participants of StarCAP reported that they work extra, unpaid hours each week to complete the paperwork.

It has been concluded therefore that there needs to be a modified process for monitoring of compliance with a nutritional policy which does not go to the extent of examination of sales records.

School review

Currently, the Department of Education and Training monitors schools' compliance on a range of matters through the school review process. Under this process, school principals report to District Directors on school performance and policy implementation. A form of reporting on compliance with a nutritional policy for school canteens would be justifiable if it effectively contributes to policy implementation and did not involve additional, excessive paperwork for canteen staff and/or the principal. Canteen staff and P&C Association representatives stated that any requirements for reporting or demonstrating compliance must be simple to understand and clear.

Proposed modifications to StarCAP

Following extensive consultation and an independent evaluation of StarCAP an alternative approach is recommended. This involves modifying StarCAP's set of "essential criteria" (Appendix 7), which accredited school canteens use to self-assess easily - by answering either a "yes" or "no". In their current form they have been used in parent education resources developed by WASCA's partner, the HBF Action for Healthy Kids, and have been included in the CaterWise program by the Department of Health, as a quick check list for parents to assess the "healthiness" of a school canteen.

The StarCAP Essential Criteria would be modified to include questions that relate to the proposed nutritional policy for school canteens and allow for progressive levels of achievement. All schools would be expected to reach at least the first level on each criterion. These criteria would operate as a means for easily demonstrating system compliance and in reporting to parents. The advantages include being clearly linked to an already known set of compliance measures (current StarCAP questions), encouraging an holistic approach, and because they are simple categorical criteria, avoiding additional ongoing paperwork.

Meeting health standards

School canteens are already subject to “spot checks” by local Councils in relation to compliance with legislated food safety standards.

4.4 Support and assistance for policy implementation

The survey and consultations provided consistent information regarding the key barriers and enablers to providing healthier food in school canteens.

Training of staff

Access to training for canteen staff and P&C representatives in nutrition and canteen management emerged as the key barrier to implementing a nutritional policy in WA.

It was generally agreed that system wide training should be provided for canteen staff so as to increase knowledge about health and nutrition. Canteens not yet achieving the minimum standards of achievement should be given priority for training.

Facilities

Sixty per cent of school canteens have limited food preparation capacity.

The setting of standards and the development of menus should not be dependent on canteens having extensive food preparation facilities. Canteens should be provided with advice on the how to best use healthy processed and fresh products which avoid excessive levels of fat, salt and sugar.

Practical support

A large barrier to changing to healthier food choices is practical support according to survey respondents (for example concerns about ease of preparation; wastage; and lack of time). A recurrent concern was the decline in volunteers as a barrier to healthier food choices. A comparison with data from previous canteen surveys shows that the number of volunteers has continued to decline with a third of all schools reporting that they have only 1 – 10 volunteers.

Assistance will need to be provided for staff facing canteen management issues such as workflows to streamline food preparation; sourcing of healthier alternative products; ideas for healthy food in limited time and facilities, managing prices and supplies for a profitable canteen, attracting and working with volunteers and sharing information through a canteen newsletter. Ongoing and sustainable funding for WASCA as the main source of training is a key to supporting implementation of a nutritional policy.

A nutritional policy for healthier canteen food must take into account the real pressures for time and efficiency in a canteen service, linked as it is to the declining source of volunteer support.

Support is needed for all canteens but is particularly essential for canteens in small schools and regional schools.

Buying groups

In general, levels of profitability are low (only 74% percent of 445 respondent schools returned a net surplus from their canteen service in 2005). A significant proportion of canteens that reported a net loss in 2005 were in schools with less than 200 students (40%) and in schools in regional areas (33%).

A key supporting strategy should be the initiation of “buying groups” amongst school canteens within a geographical location.

This would assist in increasing orders and demand from suppliers for the Star Choice or healthy alternative products and would be of most benefit to schools in rural or regional areas where supply of healthier products was reported to be limited.

Community understandings

There were reports of deep misconceptions amongst parents and the community generally regarding what comprises healthy eating (evident in the lunches brought from home or conflicting requests to the canteen staff). In the survey, the most commonly reported preventative factor was 'lack of parent support'. Survey respondents cited 'parent requests' (41%) and 'support from teaching staff' (41%) as positive influences on the provision of healthier food in canteens.

Resources and strategies for schools to communicate to their communities about the benefits of a nutritional policy should be provided to overcome misconceptions about the benefits and ways to achieve healthier food in schools.

Whole school approach

Inconsistency in the messages to students about healthy eating and lack of support from the school community for a healthy school canteen prevented schools and canteens working together for change.

Education for parents, students, teachers and principals is essential so that changes are supported across the school leading to better uptake by students. There needs to be support from teachers and Principals through a whole school approach (for example, "health committees") and better use of health promotion officers and School Nurses to support canteen promotional days and changes to the canteen menu in general.

Resources

A package of resources needs to be developed to support consistent introduction of a Government policy for healthy canteens adaptable across the school system.

Integrated resources should be developed which include informative websites, best practice DVDs, canteen menu planning guides, PowerPoint presentations and other explanatory information for parents, students, teaching and canteen staff. Any resources developed to support a nutritional policy for school canteens must link to the resources to support increased physical activity in public schools.

Appendix 1: Organisations represented in consultations

Albany Primary School
Albany Senior High School
Anaphylaxis Australia
Association of Independent Schools WA
Australian Dental Association (WA Branch)
Australian Medical Association
Bethel Christian School
Camboon Primary School
Cancer Council
Carnarvon Primary School
Carnarvon Senior High School
Catholic Education Office of WA
Child and Community Health Branch
Curriculum Standards Directorate, DET
Curtin University
David Purslow & Associates (consultants)
Delron / Mount Lawley Senior High School
Department of Health
Diabetes Australia
Dieticians' Association
East Carnarvon Primary School
Fonterra Brands WA
Foodbank
Hedland Senior High School
Home Economics Institute of Australia (WA Division)
John Forrest Senior High School
Karratha Primary School
Karratha Senior High School
Kelmscott Senior High School
Kent Street High School
Little Grove Primary School
Maylands Peninsula Primary School
Meerilinga
Morley Senior High School
Mount Lockyer Primary School
Mrs Macs
Murdoch University
National Heart Foundation (WA Branch)
North Albany Senior High School
Onslow Primary School
Orana Catholic Primary School
Pegs Creek Primary School
Pilbara Division of General Practice
Pilbara Gascoyne Population Health Unit - West
Port Hedland Primary School
Presbyterian Ladies College
Red Cross Foodcents Program
Roebourne Primary School
South Ballajura Primary School
South Hedland Primary School
Sports Dieticians Australia and Nutrition Australia
St Cecilia's Catholic Primary School
St Luke's College
St Mary's College, Carnarvon
St Stephen's School
Tambrey Primary School
WA Council of State School Organisations (WACSSO)
WA Country Health Service - Great Southern
WA Country Health Service - Midwest
WA Country High School Hostel Authority
WA District High School Administrators' Association
WA Fruit Growers
WA Primary Principals Association
WA School Canteen Association (WASCA)
WA School Canteen Suppliers
Waratah
West Coast District Education Office, DET
Western Potatoes
Wheatbelt Public Health Unit
Yakamia Primary School

Appendix 2: Expert Reference Group members and terms of reference

Members:

Norma Jeffery (Chair)	Executive Director Policy, Planning and Accountability, Department of Education and Training (DET)
Professor Colin Binns	Public Health, Health Sciences and Western Australian Centre for Health Promotion Research, Curtin University
Robin Bromley	WA School Canteen Association & President of FOCiS
Nancye Buchanan	Parent, Kent Street High School
Keren Caple	Principal Education Officer - Health and Physical Education / Physical Activity, DET
Glen Cardwell	Sports Dieticians Australia, Nutrition Australia
Clair Chatel-Holden	Channel Manager Education, Fonterra Brands
Michael Ciccarelli	Assistant Director Curriculum, Catholic Education Office
Debbie Doody	Canteen Manager, John Forrest Senior High School
Lee Hayes	Canteen Manager, South Ballajura Primary School
Tanya Hill	Councillor, WA Council of State School Organisations
Noelene Mathews	Home Economics Teachers' Association
Margaret Miller	Principal Policy Officer, Department of Health
Nadine Paul	Nutrition Coordinator Northam, Department of Health
Lucy Treleaven	Home Economics Teacher, St Stephen's School
Sandra Vale	Parent
Alison Woodman	President, WA State School Executives Association (also representing WA Primary Principals Association)
Karen Yap	SAEC Executive Officer, Association for Independent Schools WA
Susan Zehnder	Parent, Sorrento Primary School
Gail Wyatt	A/Manager Strategic Policy and Planning, DET
Lynda Suchodolski	A/Policy and Research Officer, DET (Executive Officer)
Nhi Do	A/Principal Policy Officer, DET (Executive Officer)

Terms of reference:

1. Provide the Minister with advice on issues relating to healthy nutrition within schools to improve student health and performance.
2. Investigate introduction of compulsory accreditation of canteens across State.
3. Consider the impact and scope of Commonwealth requirements.
4. Develop policy regarding healthy nutrition in schools that encompasses all food supplied in the school environment (including canteens, excursions, school functions, fundraising and classroom reward schemes).
5. Develop policy implementation strategy with consideration of issues such as those faced in regional areas.

Appendix 3: Food Categories-rationale, examples and minimum nutrient criteria

GREEN: Fill the menu – Encourage and promote these foods and drinks. MEET THE CRITERIA FOR STAR CHOICE REGISTRATION

These foods and drinks should be encouraged and promoted to students as the best choice and included as a major part of the daily school canteen menu.

Foods from this category of the food and drink spectrum are the best choices because in general they:

- are excellent sources of important nutrients
- are low in saturated fat and/or added sugar and/or salt
- help to avoid an intake of excess energy (kilojoules).

Foods and drinks in this category are based on the basic five food groups and *The Australian Dietary Guidelines for Children & Adolescents*. Included are bread, cereals, rice, pasta, noodles, vegetables, fruit, reduced fat milk, yoghurt, cheese, lean meat, fish, poultry, eggs and legumes. Providing a range of healthy food choices is important for variety. Water is an important part of this category. Many foods in this section are fresh and unprocessed, e.g. fresh fruit and vegetables, and therefore are acceptable without Star Choice registration.

AMBER: Select carefully and limit – Do not let these foods and drinks dominate the menu and avoid large serving sizes. MEET THE CRITERIA FOR STAR CHOICE REGISTRATION

Selecting foods and drinks carefully means:

- reducing the number of AMBER foods and drinks offered
 - selecting healthier choices from this category
- offering some of these foods and drinks only on certain days of the week
- avoiding large serving sizes.

AMBER foods are mainly processed foods that have had some sugar, salt or fat added to them. Although they have some nutritional value, these foods should be selected carefully because in general they:

- contain moderate amounts of saturated fat and/or added sugar and/or salt
- can, in large serve sizes, contribute excess energy (kilojoules).

Don't let these foods and drinks dominate

The foods and drinks that are found in the AMBER category offer convenience. It is acknowledged that this is very important in a school canteen setting. However, these products should not dominate the menu at the expense of healthier choices. A selection that consists mostly of AMBER foods will provide students with food choices containing too many kilojoules at the expense of the fresh food choices that children and young people need for health and vitality.

Avoid large serving sizes

There is a general trend towards serving or packaging foods and drinks in larger serving sizes, for example, some meat pies are 25 per cent bigger today than they were several years ago. Eating foods and drinks in larger serve sizes makes it easier to consume excess kilojoules. Select moderate serve sizes instead. If you are packaging and promoting foods and drinks in the canteen consider the size of the serve in terms of the age of the children.

Select healthier choices within the AMBER category

There are healthier product choices within the AMBER category of the spectrum that contain reduced levels of saturated fat, salt or sugar when compared to the regular products. To assist in selecting foods and drinks that are healthier choices, canteen staff can use the FOCiS Star Choice Registered Product List available from the Western Australian School Canteen Association.

RED: Off the menu DOES NOT MEET THE CRITERIA FOR STAR CHOICE REGISTRATION

The foods and drinks that make up the RED category of the Food and Drink Spectrum are based on the 'extra' foods as defined in *The Australian Guide to Healthy Eating*. These foods and drinks are not supplied through the school canteen, because they:

- lack adequate nutritional value
- are high in saturated fat, and/or added sugar and/or salt

- can contribute excess energy (kilojoules)
- can contribute to tooth decay and erosion.

There is ample opportunity for students to consume these foods and drinks outside school and at the discretion of their parents or guardians.

GREEN- Fill the menu	Examples
Breads	A variety of bread types
Cereal foods	Wholegrain cereals, pasta, noodles, rice
Vegetables	Vegetables and salads (reduced fat dressing only), all salad mixtures
Fruit	Fresh, frozen and tinned (in natural juices)
Legumes	Tinned, (eg. bean mix, kidney beans), cooked
Reduced fat dairy products	Reduced fat: milk (plain and flavoured) , yoghurt (fresh, frozen, plain or fruit), cheese
Lean meat, fish, poultry & alternatives	All lean meats, chicken (no skin) or <i>Star Choice</i> registered meats, *, fish (eg. tuna, salmon, sardines), and egg
Sandwich fillings	All lean meats, lean chicken, fish, creamed corn/corn kernels, egg, canned spaghetti (reduced salt), salads, baked beans, low fat cheese, hommos, vegemite, yeast spreads, fish spreads, etc, *
Hot food	Jaffles/hot rolls/toasted sandwiches (fillings as for sandwich fillings), baked potatoes, rice, soups, toast, English muffins, crumpets (wholemeal), raisin toast, and meals meeting the <i>Star Choice</i> selection criteria such as curry and rice and pasta dishes etc
Snacks	Yoghurt, scones, raisin or fruit bread, pikelets, cheese sticks, bread sticks, bruschetta, water crackers, rice cakes, rice crackers, popcorn (plain/low fat/flavoured), dried fruit, seed packs, trail mix based on breakfast cereals, <i>Star Choice</i> registered snacks and *
Drinks	Water, reduced fat milk, fresh fruit milkshakes, soy, 100% fruit juice (small size), plain mineral water
AMBER- Select carefully and limit	Examples
Breakfast cereals	Refined cereals with added sugars
Full fat dairy foods	Milk, yoghurt, custard, low fat dairy desserts and cheese
Savoury commercial products	<i>Star Choice</i> registered pies, pastries and sausage rolls, <i>Star Choice</i> frankfurts, ovenable fish/chicken/potato portions- choose foods from the <i>Star Choice</i> registered product list as they are reduced fat/salt, *
Snack food bars	Breakfast bars, cereal bars and fruit bars that are <i>Star Choice</i> registered products, *
Savoury snacks	Oven baked vege chips, garlic or herb bread (lightly spread) and/or <i>Star Choice</i> registered products, *
Cakes, muffins and sweet biscuits	<i>Star Choice</i> registered cakes, muffins and sweet biscuits (reduced fat and/or sugar and high in fibre due to wholemeal flour, added bran, fruit or vegetables), <i>Star Choice</i> registered products, *
Ice-creams, ice blocks, fruit based icepoles, slushees	<i>Star Choice</i> registered ice-creams, milk based ice confectionary, frozen yoghurts and rice cream, *
Drinks	Fruit drinks, mineral waters flavoured with fruit juice, low joule cordials
RED- Off the menu	Examples
Sugar and artificially sweetened drinks	Soft drinks, artificially sweetened soft drinks, energy drinks, cordials, sports drinks and mineral waters flavoured with sugar, high caffeine drinks (eg. drinks containing guarana)
Confectionery	All types, caramelised popcorn
Full fat pastry items	All types that do not meet <i>Star Choice</i> criteria for registration
Sandwich meats	High fat sandwich meats including polony (devon) and salami
Deep fried foods	All types
Savoury snacks	Crisps, chips and other similar products not approved by WASCA
Ice-creams	Chocolate coated and premium ice-creams
Sandwich fillings	Honey, jam, chocolate spreads, confectionary sprinkles
Cakes, muffins, sweet pastries	Croissants, doughnuts, cream filled buns/cakes, sweet pastries, slices

* Or meets the *Star Choice* criteria for registration.

- This table represents examples suitable for each food category. This list is not the entire list of foods available to schools.
- Nuts and nut spreads do not appear in this list because their inclusion on the school canteen menu should be considered with respect to students' nut allergies. Please refer to the Department of Education and Training's School Health Policy and Anaphylaxis Advice Paper as well as your school's Food Allergy Policy for the consideration of inclusion of nuts and nut spreads on the canteen menu.

Star Choice minimum nutrient criteria

The Star Choice minimum nutrient criteria have been provided here only for the “extra” foods on the *Australian Guide to Healthy Eating* as these are the type of food and drinks that are most often queried. However, there are Star Choice minimum criteria for many other types of food and drinks which are available from either the Federation of Canteens In Schools (FOCiS) or the WA School Canteen Association (WASCA).

“≤” means less than or equal to. The food or drink item must have a nutrient amount less than or equal to that specified in order to be available to be sold in school canteens.

“≥” means more than or equal to. The food or drink item must have a nutrient amount more than or equal to that specified in order to be available to be sold in school canteens.

Hot, mixed foods and meat products	Energy (per 100g)	Saturated fat (per 100g)	Sodium (per 100g)	Maximum single portion size
Hot savoury pastry and pizza style products e.g. meat pies, sausage rolls, vegetable pies, quiche and savoury pizza style products.	≤ 1000kj	≤ 5g	≤ 400mg	200g
Pasta and noodle dishes e.g. ravioli, lasagnes, pasta in sauce, noodles in sauce.	≤ 1000kj	< 5g	≤ 400mg	200g
Processed meat, fish, poultry and soy (meat alternative) products e.g. meat, poultry, fish burgers, patties, meat balls, sausages, crumbed or battered nuggets, strips or balls.	≤ 1000kj	≤ 4g	≤ 450mg	100g

Snack foods and drinks	Energy	Total fat	Saturated fat	Sodium	Fibre	Other
Potato wedges and chips (oven baked varieties only).		≤ 5g per 100g	≤ 3 g per 100g	≤ 400 mg per 100 g		100g serve limit size
Formed vegetable products e.g. hash browns, potato gems, shaped potato balls (oven baked varieties only).		≤ 8g per 100g	≤ 3 g per 100g	≤ 400 mg per 100 g		100g serve limit size
Sweet and savoury snacks e.g. crisps, noodles, crackers, popcorn, pretzels, fruit chips, sweet biscuits and cookies.	≤ 600kj per serve		≤ 2g per serve	≤ 200mg per serve	≥ 1g per serve	No added confectionary
Sweet and savoury muffins, muffin bars, fruit pockets, sweet fruit pies, fruit cakes, plain and flavoured cakes, custard pies and slices.	≤ 900kj per serve		≤ 3g per 100g	≤ 300mg per 100g	≥ 1.5g per serve	No added confectionary
Sweet and savoury breads, scones and pikelets e.g. fruit buns, cheese/garlic/herb breads and savoury scones.	≤ 900kj per serve		≤ 3g per 100g	≤ 450mg per 100g	≥ 1.5g per serve	No added confectionary
Dairy based ice creams and frozen yoghurt.	≤ 450kj per serve		≤ 2g per serve			≥ 80mg calcium / 100g No added confectionary
Fruit based ices, slushies and ice poles.	≤ 400kj per serve					≥ 90% fruit juice. No added confectionary
Breakfast cereals.		≤ 8g /100g	≤ 1g per 100g	≤ 600mg per 100g	≥ 3g per 100g	≤ 20g sugar per 100g*.
Bottled flavoured and/or carbonated waters (not fortified).	≤ 300kj per serve	No added fat.		≤ 20mg per 100ml		Up to 4% added sugars

* If more than this then all sugars above 20g/100g must come from fruit or milk. No added confectionery.

Appendix 4: Dietary Guidelines for Children and Adolescents in Australia

Encourage and support breastfeeding

Children and adolescents need sufficient nutritious foods to grow and develop normally

- Growth should be checked regularly for young children
- Physical activity is important for all children and adolescents

Enjoy a wide variety of nutritious foods

Children and adolescents should be encouraged to:

- Eat plenty of vegetables, legumes and fruits
- Eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain
- Include lean meat, fish, poultry and/or alternatives
- Include milks, yoghurts, cheese and/or alternatives
 - Reduced-fat milks are not suitable for young children under 2 years, because of their high energy needs, but reduced-fat varieties should be encouraged for older children and adolescents
- Choose water as a drink
 - Alcohol is not recommended for children

and care should be taken to:

- Limit saturated fat and moderate total fat intake
 - Low-fat diets are not suitable for infants
- Choose foods low in salt
- Consume only moderate amounts of sugars and foods containing added sugars

Care for your child's food: prepare and store it safely

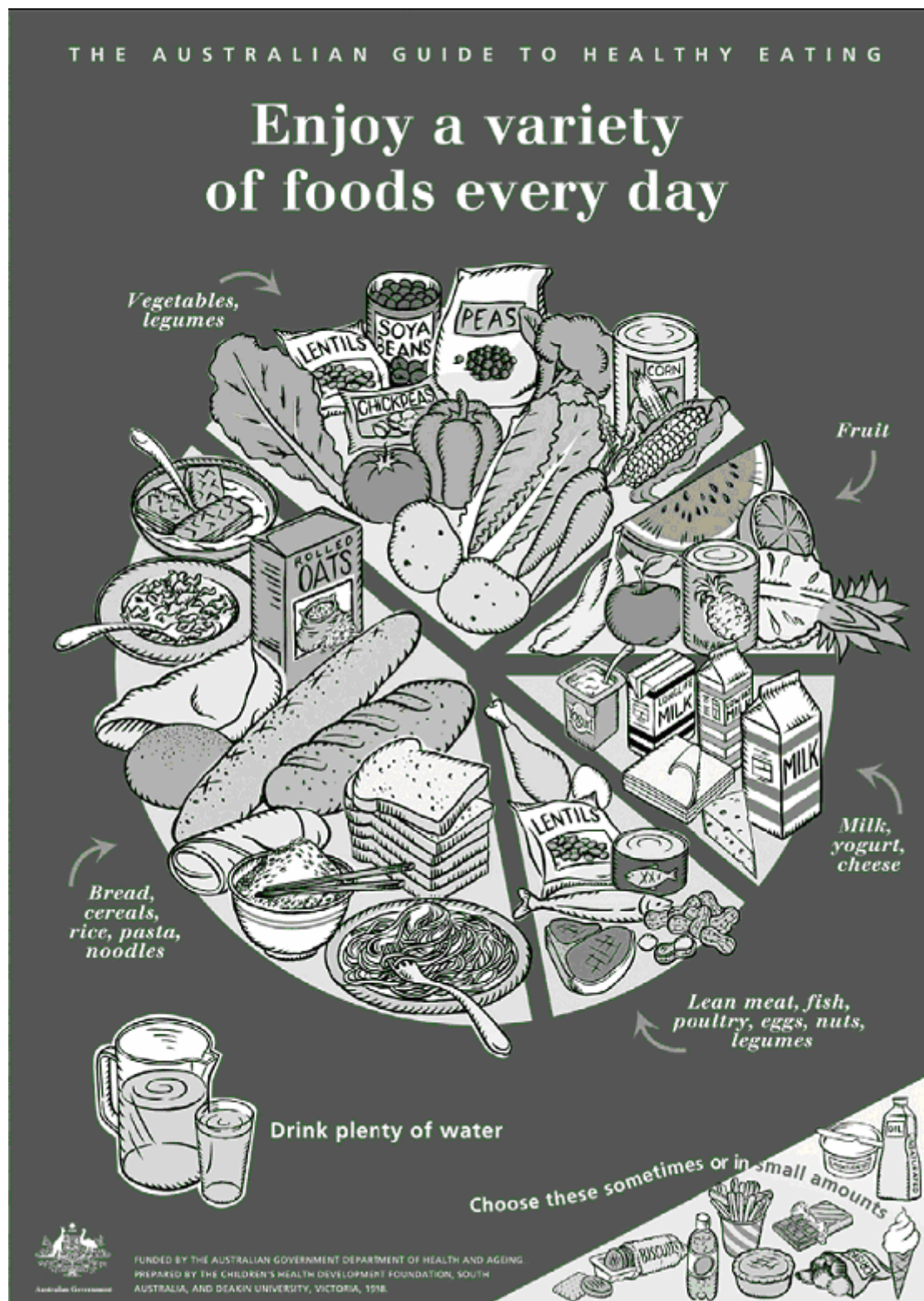
These guidelines are not in order of importance.

Each one deals with an issue that is key to optimal health.

Two relate to the quantity and quality of the food we eat—getting the right types of foods in the right amounts to meet the body's nutrient needs and to reduce the risk of chronic disease. Given the epidemic of obesity we are currently experiencing in Australia, one of these guidelines specifically relates to the need to be active and to avoid overeating.

Another guideline stresses the need to be vigilant about food safety, and, in view of the increasing awareness of the importance of early nutrition, there is a further guideline that encourages everyone to support and promote breastfeeding.

Appendix 5: The Australian Guide to Healthy Eating



From: Smith A, Smith B, Kellett E & Schmerlaib Y (1998) *The Australian guide to healthy eating: Background information for nutrition educators*. Australian Government Department of Health and Ageing, Canberra. Accessed at <http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/health-publth-publicat-document-fdeduc-cnt.htm> on 17.08.06.

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Appendix 6: WA School Canteen Association

Accreditation - StarCap

WA School Canteen Association (WASCA) Star Canteen Accreditation Program (StarCAP) is one approach adopted by some canteens in WA. StarCAP is a voluntary program of accreditation aimed at improving the nutritional standard of foods sold in school canteens. The main components of the program are training, linking the school canteen with the school curriculum, gradual increases in the proportion of sales of healthy foods in the canteen and compliance with food safety regulations. StarCAP is an holistic program which requires the development of a school-level canteen policy so that the healthy changes are sustainable.

The StarCAP program has three levels of accreditation. The program is designed so that the lowest level of accreditation is a realistic level for all schools attempting healthy changes for the first time. Schools are then encouraged to improve their sales of healthy foods and achieve higher accreditation levels at a pace appropriate to their environment.

Many canteen supervisors in the focus groups reported that they were following similar approaches although they were not accredited. This was supported by the survey finding that 88% of respondents were aware of the StarCAP program.

It should be noted that while WA school canteens under StarCAP work towards ceasing all sales of foods not meeting the minimum nutritional criteria, the lowest accreditation standard currently allows for 30% of sales to come from foods that are not Star Choice registered or meet minimum standards. This was intended to encourage all schools to become accredited in a voluntary system and not discourage schools by setting too high a standard.

Food registration - Star Choice

The nutritional standards for school canteen food under the StarCAP system are found in the nutrient criteria used in the Star Choice food registration system.

Star Choice is a one tiered system of registration where food and beverages are assessed as being in/healthy or out/unhealthy (based on a set of nutrient criteria; different criteria exist for different categories of food). Registered products must not exceed the levels of energy, total fat, saturated fat, sodium and sugar provided in the criteria, and where appropriate a minimum amount of calcium and fibre is also set for the food type.

StarCAP accreditation levels are linked to the proportion of food sold in the canteen that are either Star Choice registered or meet criteria for registration (recipes for freshly made food or nutrient panels for unregistered products can be sent to WASCA for assessment).

Addressing availability of food groups

An alternative system for a nutritional policy is that used in New South Wales and Queensland based on the NSW Fresh Tastes@Schools Strategy. The system is a three-tiered approach to categorisation, in which foods can be labelled:

- RED 'Occasional'
Do not sell these foods on more than two occasions per term;
- AMBER 'Select carefully'
Do not let these foods dominate the menu and avoid large serving sizes; and
- GREEN 'Fill the Menu'

Encourage and promote these foods in the canteen.

The main difference between a three-tiered “traffic lights” system and a one-tiered approach to nutritional policy is that, beyond a minimum nutrient standard, a group of food and drinks are identified as having sufficiently high levels of fat, sodium and/or energy that they should be further restricted (e.g. sold only sometimes, only healthier versions used and large serving sizes avoided). Most of these would be processed foods such as savoury commercial products (pies, pasties, sausage rolls), full-fat dairy, processed meats, snack food bars, cakes/muffins and sweet biscuits; and full-fat dairy products. A one-tiered approach, without any other constraints, allows less healthy foods to be sold unrestricted in schools. This was reflected in the recent survey where it was found that the ten most commonly sold items across all schools included ice-creams or icy-poles, pies, pasties or sausage rolls, sweet muffins, ovenable fish or chicken portions, cakes or sweet biscuits, pizza and confectionery.

WASCA acknowledges that achieving a balance in the foods sold in canteens is currently an issue and has developed guidelines on how often certain foods should be sold (see **Appendix 7**). The StarCAP program also includes a requirement that there is a ‘pastry-free’ day on at least one day that the canteen trades (even low-fat and vegetarian pastries). However, WASCA argues that StarCAP, as a holistic program of accreditation and monitoring based on sales evidence, is the best way to achieve sustainable improvements in healthy school canteens, because a stand alone policy for nutritional standards lacks support or connection to the school for sustainability. The issue of accreditation is discussed more fully at **4.3 Monitoring policy compliance** and **4.4 Support for policy implementation**. It may be possible to incorporate an ‘AMBER’ type of category into the StarCAP and Star Choice system.

Training and statewide support

During the consultations it was often raised that the support provided through training, helpline assistance and support on a consultative basis by the WA School Canteen Association (WASCA) was of a high standard and very effective. As mentioned earlier, WASCA have supported schools in participating in the holistic canteen accreditation program StarCAP. They also support schools, including those not accredited, through the negotiation and maintenance of the food registration program Star Choice. All schools in WA are provided with the Star Choice Buyers’ Guide regardless of whether they are StarCAP participants. The Buyers’ Guide was described as a “bible” by one canteen supervisor. WASCA also organises the annual WA Healthy School Canteen Conference and Food Expo with the support of the National Heart Foundation Australia (WA Division), HBF Action for Healthy Kids and the Department of Health. WASCA also provides a 6 hour training course upon request by school canteens. The course began with HealthWay funding in 1999 and approximately 400 people have undertaken the course. HealthWay funding has not been available in recent years. The course is provided on a cost recovery basis with some in-kind support by the Department of Health’s regional branches.

Appendix 7: WASCA Nutritional Guidelines for School Canteens

Foods/drinks that will be sold, promoted and available every day	Items that may be sold to increase variety but limited in availability*	Foods that won't be sold at all
<ul style="list-style-type: none"> • Fruit, preferably fresh but may include frozen, canned (in natural juice) • Vegetables, fresh, frozen or canned varieties, e.g. baked beans, 3 bean mix. Salads will be made using reduced fat dressings • A variety of bread types, including wholegrain and/or wholemeal • A variety of sandwich/roll fillings that are all available with salad, e.g. egg, reduced fat cheese, skin-free chicken, tuna • Reduced fat dairy products including plain milk • Lean meats, e.g. skin-free chicken meat • Fish, including varieties canned in spring water • Fruit juices –no added sugar preferred • Plain water 	<ul style="list-style-type: none"> • Reduced fat pastry items approved by WASCA or the NHF (there will be at least one day that the canteen operates where pastry items will not be sold) • Hot dogs made using frankfurts approved by WASCA or the NHF • Sausages approved by WASCA or the NHF for sausage sizzles or special events organised by the canteen • Assorted cakes/biscuits or muffins approved by WASCA or the NHF • Savoury and/or sweet snack foods approved by WASCA or the NHF • Icecreams/icy poles approved by WASCA or the NHF • Mineral waters flavoured with fruit juice (no added sugar or artificial sweeteners) 	<ul style="list-style-type: none"> • Full-fat pastry items • Deep fried food of any description • Sweet sandwich fillings including jam, nut spreads, honey or confectionery sprinkles • High fat sandwich meats including polony (devon) and salami • Confectionary and/or savoury snack items not approved by WASCA or the NHF • Chocolate confectionary • Soft drinks, cordial, sports drinks • High caffeine drinks (eg drinks containing guarana)

***Note - The number of days that food/beverages from this column are available will be limited .e.g. items such as registered hot dogs, nuggets, hash browns, reduced fat pastries are not recommended for every day consumption.**

WASCA Recommended Food List

General rules for selection – Include a wide variety of fruit, vegetable, bread, pasta and rice choices; use spreads sparingly; select reduced fat/salt/sugar products and choose varieties which are good sources of dietary fibre/calcium/iron where appropriate.

Breads – all types including –

White, wholemeal, multigrain, high fibre, wholegrain, pita, raisin bread/fruit breads, English muffins, lavash, Lebanese, mountain bread, foccacia, bagels, rolls, wholemeal crumpets, wraps.

Sandwich Fillings –

Salad, fruit, fresh/dried combinations (e.g. banana and date), lean meat, lean chicken (no skin), fish (e.g. tuna, salmon, sardines) in spring water, creamed corn/corn kernels, egg (hard boiled, mashed, sliced), canned spaghetti (reduced salt), hummus, baked beans (reduced salt), cheese (reduced fat), vegemite/yeast spreads (used sparingly), peanut paste (according to school policy).

Fruit –

Whole fresh fruit in season (or cut portions), fruit salad (fresh or pre-cut and unsweetened), frozen or canned fruits (in natural juice) All may be served with fruit yoghurts as dip.

Drinks -

Water (tap, spring, mineral or sparkling - no added sugar), milk or calcium enriched soy drink (plain, flavoured or fresh fruit milk shakes) reduced fat varieties encouraged, fruit juice (100% juice, either chilled, frozen or sparkling), drinking yoghurt (reduced fat).

Salads -

All garden vegetable mixtures, bean mix, tabouli, rice, potato, coleslaw and pasta based. Dressings should be low fat/salt. Salads may include lean meats, reduced fat cheese and egg. Chunky vegetable pieces with low fat/salt dips, vegetable sticks (e.g. carrot, celery).

Hot foods -

Jaffles/hot rolls/toasted sandwiches (fillings as for sandwich fillings above), baked potatoes (cooked in skins, split and filled with one or more of the sandwich fillings above or savoury mince), rice (savoury or boiled, stir fried and served with liberal amount of vegetables), burgers using patties low in fat/salt (meat, chicken, fish, lentil, vegetable) with liberal salad, pizza either bread based or commercial using low fat/salt toppings and liberal vegetables, soups (reduced salt/fat), toasts (bread, muffins, crumpets or raisin bread, thinly spread), pasta (reduced fat/salt toppings), wraps (fillings as for sandwich fillings or burgers with liberal salad), reduced fat/salt meat, chicken or vegetable pastry lines (with at least one day pastry free).

Snacks -

Fresh fruit pieces (or frozen pieces), vegetable sticks/pieces, yoghurt, (fresh, frozen, plain or fruit), toasted bread, thinly spread, plain or fruit scones, raisin or fruit bread, low fat fruit muffins, finger buns or English muffins thinly spread, pikelets (plain or with fruche or fruit), breakfast cereals, cheese (reduced fat - sticks, cubes, slices or triangles), garlic or herb bread (minimal spread), bread sticks, bruschetta, popcorn (low fat plain), rice cakes, crisp bread, dried fruit with nuts and seeds, trail mix based on breakfast cereals (low fat/sugar types), wheat biscuits or water crackers, fruche, icecream (plain), reduced fat encouraged, custard, fruit juice/milk based icy poles (those meeting Star Choice nutrition criteria for registration),

For further food ideas and recipes specific to school canteens see the 'Canteen Cuisine' Cookbook available from WASCA.

Adapted with permission from a document produced by NSW School Canteen Association Inc.

Revised July, 2006

Appendix 8: StarCAP Essential Criteria

SECTION A: To apply for Three, Four or Five Star Accreditation, ALL the criteria in Section A MUST BE MET.

CANTEEN POLICY

Whether your canteen is managed by a body within the school or leased, a canteen policy outlining the aims of your canteen which has been developed by your whole school community, is an important document.

- Q1** Do you have a written canteen policy? Yes No
- Q2** Has your canteen policy been reviewed and adopted by your school community within the last two years? Yes No
- Q3** Is your menu consistent with your canteen policy? Yes No
- Q4** Does your policy state that your canteen food handling practices comply with current legislation? Yes No

SCHOOL COMMUNITY INVOLVEMENT

- Q5** In the newsletter sent to your school community, is there a segment at least once per term for raising canteen issues and/or publicising canteen events?
If you do not have a newsletter, are alternative methods used? (e.g. letters, flyers etc.) Yes No
- Q6** Has your canteen participated in a minimum of one special promotion theme day per term **over the three terms of data collection?** (e.g. Heart Week, Fruit 'n Veg Week, Healthy Bones Week, Book Week, cultural or religious festivities, sporting days etc.) Yes No

CANTEEN MENU

- Q7** Does your canteen have a variety of bread types (e.g. at least 2 of the following: high fibre white, wholemeal, multigrain, pita, Lebanese, lavash, mountain), available for sale? Yes No
- Q8** Does your canteen have fruit available (fresh, frozen, unsweetened canned, or dried) available for sale every day the canteen is open? Yes No
- Q9** Does your canteen have vegetables (fresh, frozen, or canned) available for sale every day the canteen is open (e.g. salad in sandwiches)? Yes No
- Q10** Is plain milk available for sale every day the canteen is open? Yes No
- Q11** Are at least **FOUR** of the following sandwich or roll fillings offered by your canteen every day that it is open?:- lean meat, cheese, skin free chicken, baked beans, salad, egg, fish Yes No
- Q12** Does your canteen have at least one day per week that the canteen trades, where pastry items are not sold (i.e. before school, recess or lunch)? This includes vegetarian and reduced fat varieties. Yes No

HYGIENE & FOOD SAFETY

- Q13** Has your canteen completed the FoodSafe Food Handler Training Program? Yes No

ADDITIONAL REQUIREMENTS

- Q14** Has the canteen manager completed the 'School Canteen Food Service Short Course'? Yes No
- Q15** Is your school a current financial member of the WA School Canteen Association Inc.? Yes No

5. PART C: SURVEY FINDINGS



**2006 REVIEW OF THE NUTRITIONAL VALUE OF
FOOD SOLD IN SCHOOL CANTEENS:
SURVEY REPORT**

JULY 2006

EXECUTIVE SUMMARY

- In May 2006, all public, independent and Catholic schools were sent a survey from the Western Australian Department of Education and Training requesting information about canteen operation and the types and quantities of food sold.
- Of the 1124 schools in WA, 621 returned the surveys (55% response rate). The sample of respondents matches the population on all demographic statistics with some under-representation of regional schools.
- 88% of all schools have a school canteen or food service. 80% of public school canteens are operated by the school Parents and Citizens Association.
- The majority of school canteens: trade for the full five-day week; are open for morning recess and lunch intervals; consist of a pre-ordered, or part pre-ordered and part impulse bought lunch service; and have a Class 3 food hygiene regulation classification that restricts the level of preparation to 'heat and serve'.
- 74% of school canteens reported a net surplus in 2005 with more canteens in schools with less than 200 students and in regional schools reporting a net loss.
- Overall, the majority of school canteens reported providing a range of healthier food and drinks every day they are open, including: sandwiches or rolls (80%); yoghurt and yoghurt varieties (74%); bottled water (71%); Lebanese, pita breads and wraps (52%); salad trays (64%); 100% fruit juices (64%); whole fresh fruit (61%); and plain milk (54%).
- Only a minority of school canteens reported providing food or drinks that are excessive in energy and low in nutrients every day they are open: soft drinks (7%); hot chips or wedges (11%); potato crisps (18%); and confectionery (27%).
- However, ranking of the quantities of food and drinks sold showed that the ten most commonly sold items across all schools included: ice-creams or icy-poles; pies, pasties or sausage rolls; sweet muffins; ovenable fish or chicken portions; cakes or sweet biscuits; pizza; and confectionery. While there are healthier versions of these types of foods, significant proportions of respondents did not indicate that they used Star Choice (healthier) versions of these products.
- In addition, while the pattern of what is most commonly sold was largely similar across all school types there were some concerning differences: soft drinks were high on the list of most commonly sold items for District High and Senior High Schools (SHSs); and confectionery was high on the list for Primary and SHSs.
- With the exception of sandwiches and rolls which were fifth most commonly sold and flavoured milk (arguably because it provides calcium and low fat milk is often used) which was most commonly sold of all, healthy food options such as salads, salad trays, and vegetables were low on the list of commonly sold items.
- It is clear that across all schools more needs to be done to increase students' purchasing of healthy food from the canteen or food service by students. 88% of respondents reported that they actively promote healthy choices.
- The factors reported by respondents that assist and prevent healthier food choices suggest strategies for healthier choices in canteens including: increased knowledge and training in nutrition; increased access to healthy foods that are time and cost-efficient to prepare; and support from parents and teachers.

1. BACKGROUND

In March 2006 the Premier of Western Australia and the Minister for Education and Training announced a review of the nutritional value of food sold in school canteens.

As part of the review, a survey of all schools was undertaken to determine the types and quantities of foods and drinks currently sold in school canteens. Schools were asked to record the number of different food and drink items they sold in a specified week in May 2006. Schools were also asked to provide information regarding canteen operation. This would provide a 'snapshot' of school canteens across Western Australia to inform the development of a policy and strategies for healthy school canteens.

Research has shown that the prevention of weight gain in childhood is the most effective way of achieving healthy weight in the population and instilling good habits for life. School canteens play an important role in ensuring better student health by providing healthy food and demonstrating and reinforcing the health and nutrition curriculum.

2. METHODOLOGY

The survey was conducted by the Western Australian Department of Education and Training (DET) project team for the review of nutritional value of food sold in school canteens. The project team were guided by a stakeholder reference group consisting of representatives from the:

- Western Australian School Canteen Association (WASCA);
- Western Australian Council of State School Organisations (WACSSO);
- Western Australian Secondary School Executives Association (WASSEA) who also represented the Western Australian Primary Principals' Association;
- Department of Health;
- Catholic Education Office;
- Association of Independent Schools in Western Australia (AISWA); and
- a parent representative.

A paper-based survey (see Appendix B) was developed from earlier surveys used by WASCA and HealthWay in 1997 and 2001. Further questions were added that were of interest to the review including two questions from the *New South Wales School Canteen Manager Survey 2004* relating to factors that assisted and prevented healthy food sales (used with the permission of the NSW Department of Health).

The survey was anonymous in that respondents were not required to identify themselves or their school on the survey form. However, as an incentive to respond, coded reply-paid envelopes were provided to enable respondent schools to be entered into a lucky draw for a \$1000 cash prize. The coded envelopes were separated from the survey forms as they were received.

All schools in Western Australia were sent the survey in hard copy form, addressed to the Principal and the Parent and Citizens (P&C) Association President, at the beginning of the second school term in May 2006. Schools were reminded of the survey through email. Reminders were also posted through the WACSSO and the WASCA newsletters.

The survey data was entered into Excel spreadsheets and all descriptive and inferential analyses were conducted using the Statistical Package for the Social Sciences version 14 (SPSS v.14). Descriptive statistics were compiled for each question and analyses that included the Chi-square tests for independence, independent-groups t-tests, and ANCOVAs were conducted to assess any statistical difference between different demographic groups.

3. RESULTS

3.1 Response rate

In general, response rates of between 20% and 30% are considered 'average' for mail survey methodologies, with around 60% considered sufficiently robust to make conclusions about the population from which the sample is drawn.

Of the 1124 surveys mailed to West Australian schools, 621 completed or partially completed surveys were returned. This figure represents a 55% survey response rate, and is an improvement on the response rate for the canteen survey research conducted in WA schools in 2000⁴.

3.2 Characteristics of the sample

Based on the demographic data available, the constitution of the current sample compares well with the information available on the population. As shown in Table 1, the key areas to consider when evaluating the data from the current sample are marginal under-representations of schools with under 200 students and schools in regional areas. A more detailed analysis indicates that schools in regional areas constitute a significantly higher proportion of schools with fewer than 200 students than in schools with higher student numbers (55% compared to the population figure of 41%).

It is important to note that inferences from a sample to a population can best be made when:

- (1) the ratio of valid responses to non-responses plus invalid responses is greater than 60%;
- (2) the constitution of the sample corresponds with the constitution of the population on conceptually important demographic variables; and
- (3) the reasons for non-response are known.

In the current research, the validity of making population inferences can only be assessed through items (1) and (2), as an assessment of item (3) is beyond the scope of the project.

It is clear that the sample constitution and size in this research come very close to meeting the standards outlined above. However, some caution needs to be exercised in making inferences to the population, as reasons for population non-response are not known.

⁴ The survey research conducted by the WA School Canteen Association in 1996 and 2000 yielded response rates of 56% and 36% respectively. The total number of respondents was 573 in 1996 and 380 in 2000.

Table 1: Demographic Details for the 2006 School Canteen Survey

	% of responses (n = 621)	Population % (N = 1124)
Type of School		
Public	70	69
Catholic	16	14
Independent	14	17
School Size		
0 – 200	37*	42*
200 – 500	39	37
500 – 1000	18	16
Over 1000	6	5
Co-educational		
Yes	98	-
No – all boys	1	-
No – all girls	1	-
School Classification		
Primary only	68	71
Combined primary/secondary	11	10
District high school	5	6
Senior high school	16	13
Location		
Metropolitan	65	59
Regional	35*	41*

* Denotes a statistically significant difference.

3.2 Availability of food services

As can be seen from Table 2, the vast majority of schools provide a food service for students and staff (88%) and do not permit students to go off-campus to purchase food (95%). The proportions do not differ significantly⁵ according to whether the school is classified as primary only, combined primary and secondary, district high school, or senior high school. However, a significantly higher proportion of regional schools (9%) than metropolitan schools (3%) allow students to purchase food off-campus.

Of the schools that provide a food service, 66% are school canteens operated by a Parents and Citizens Association (P&C), 21% are canteens operated by the school, 11% have a food service provided through a retail outlet, and 3% of school food services are operated by an external organisation. The majority of public school canteens are operated by the P&C (80%), whereas Catholic schools predominantly run school-operated canteens (76%). Independent schools do not demonstrate a significant preference for either a school-operated (49%) or P&C-operated (33%) model.

⁵ The term 'significantly' used throughout this paper refers to the concept of 'statistical significance'. Statistical significance represents a level of confidence derived from the result of a statistical test that the difference between two or more values is not due to chance (a 'false' difference), but to a systematic change or difference within the population (a 'true' difference).

Table 2: Availability of Food Service in 2005 by School Classification

	% of 'yes' responses
Food Service to Students and Staff	
Primary only	59
Combined primary/secondary	10
District high school	5
Senior high school	15
Total	88
Student Permitted to go Off-campus	
Primary only	2
Combined primary/secondary	1
District high school	1
Senior high school	1
Total	5

Canteens operated by the P&C are far more prevalent in primary schools than in combined primary and secondary schools – which are the group most likely to operate the canteens themselves. District high schools show a strong preference for providing food through a retail outlet, and although senior high schools are least likely to do this, they show a small but significant tendency towards contracting external organisations to operate their canteen service.

There is a series of consistent findings for the group of schools with fewer than 200 students that makes them worthy of more detailed scrutiny. A significantly greater proportion of schools with fewer than 200 students allow students to purchase food off-campus, and provide food to students and staff through a retail outlet, than schools with larger student numbers. Also, proportionately less schools with fewer than 200 students operate the canteen service themselves. This cluster of results may be explained by an additional finding that schools with fewer students are at a greater risk of running canteen services at a net loss (see page 13). It is plausible, therefore, that schools with under 200 students are more likely than schools with larger student numbers to consider and effect alternate means of making food accessible to students and staff (i.e. providing food through a retail outlet or by allowing students to leave the campus to purchase food). However, as regional schools are over-represented among schools with under 200 students, and as a greater proportion of regional schools run the canteen service at a net loss than metropolitan schools (see page 13), these findings may be more indicative of the characteristics of *regional schools with fewer than 200 students*.

3.3 Canteen operation

It is clear from Table 3 that the majority of canteens in WA schools: (1) trade for the full five-day week; (2) are open for trading predominantly during the morning recess and lunch intervals, and before school to take orders; (3) consist of a pre-ordered, or part pre-ordered and part impulse bought lunch service; and (4) have a Class 3 food hygiene regulation classification that restricts the level of preparation to 'heat and serve'. It is important to note that there was no significant difference between the proportions of public (37%), Catholic (38%), and independent (51%) schools with a Class 1 hygiene regulation classification.

Table 3: Canteen Trading Times and Type of Lunch Service During 2005

	% of responses
Days per week open	
1	9.5
2	9.5
3	16.5
4	7
5	57.5
When was the canteen open?	
Before school for sale of food items	33
Before school to take orders	74
Morning recess	90
Lunch	100
Afternoon recess	4
After school	3
Which best describes your lunch service...	
Pre-ordered food	57.5
Self-service foods	3
Part pre-ordered, part impulse bought food	39.5
What is the classification class of your canteen under the current food hygiene regulations?	
Class 1 (extensive food preparation permitted)	39
Class 3 (restricted preparation/heat and serve)	61

3.4 Map of canteen food sold in WA schools during the week of May 15 to 19 2006

To enable the development of a map of all food types and quantities sold in school canteens throughout the State, schools were asked to record the availability and quantities of 43 categories of food items sold during the week of 15-19 May 2006. Ninety-two percent of respondents indicated that the 'survey week' was a typical week, so it can be assumed that the results of this section are an accurate reflection of weekly sales throughout this period of the school year. Also, only a small proportion of schools currently run a 'breakfast program or club' (15%), so sales of items such as breakfast cereal and toast tend to be restricted to a small number of schools.

Table 4 provides a list of the 10 most available menu items across all respondent schools (for the full table that includes all categories of food items, see Appendix A. As can be seen from the table, 84% of schools with a canteen sell sandwiches and rolls at an average rate of 88 per every 500 students (per week). A slightly smaller proportion of schools sell sandwiches and rolls everyday the canteen is open for trade (80%) and only about a half of those schools use Star Choice Registered products in their sandwiches and rolls (43%).

Table 4: Top Ten Food Items Sold During 'Canteen Week' Ranked in Order of Availability

Food Item	Food Available Through Canteen (% of Schools)	Food Available Everyday the canteen traded (% of Schools)	Food Available Only Sometimes (% of Schools)	Is a Star Choice Registered Product (% of Schools)	Average Quantity Sold per 500 Students in schools where item available
1. Sandwiches and rolls	84	80	3	43	88
2. Pies, pasties, and sausage rolls	82	46	35	46	159
3. Flavoured milk	79	77	2	36	200
4. Yogurt and yoghurt varieties	78	74	5	41	44
5. Ice-creams or icy-poles	77	71	6	36	184
6. Pizza	76	52	24	39	60
7. Bottled water	74	71	2	40	45
8. Lasagne, spaghetti or other pasta	70	43	27	44	31
9. Salad trays	70	65	6	33	14
10. Burgers	68	35	33	40	53

It is worth noting from the above table that the three products sold in relatively high quantities were:

- flavoured milk (200 per 500 students);
- ice-creams or icy-poles (184 per 500 students); and
- pies, pasties, and sausage rolls (159 per 500 students).

An arrangement of the list of food items according to the most commonly sold at school canteens throughout the State is provided in Table 5 (overpage). The 'Most Commonly Sold Index' was calculated by taking the product of the number of school canteens making the item available and the quantity of items sold per student in those schools⁶. As can be seen from the table, the three food item types previously mentioned feature at the top of the list (for the full table that includes all categories of food items, see Appendix A).

From a comparison of Table 4 and Table 5, it is clear that yoghurt and yoghurt varieties, bottled water, lasagna, and burgers - all highly available foods across schools - are sold in relatively small quantities as they do not feature in the ten most commonly sold food items. On the other hand, items including ovenable fish and chicken portions, sweet muffins, cakes and sweet biscuits, and confectionary, are all sold in relatively large quantities, as evidenced by their elevation into the top ten foods in Table 5.

⁶ The values belonging to the 'Most Commonly Sold Index' **do not** represent tangible quantities of sales, but rather the index should be viewed only as a tool that enables the ranking of food items (see Note 1 in Appendix A for further explanation).

Table 5: Top Ten Food Items Sold During 'Canteen Week' Ranked in Order of Most Commonly Sold

Food Item	Food Available Through Canteen (% of Schools)	Food Available Everyday the canteen traded (% of Schools)	Food Available Only Sometimes (% of Schools)	Is a Star Choice Registered Product (% of Schools)	Average Quantity Sold per 500 Students in schools where item available	Most Commonly Sold Index
1. Flavoured milk	79	77	2	36	200	31.7
2. Ice-creams or icy-poles	77	71	6	36	184	28.3
3. Pies, pasties, or sausage rolls	82	46	35	46	159	25.9
4. Fruit juices other than 100%	67	65	2	22	120	16.0
5. Sandwiches or rolls	84	80	3	43	88	14.8
6. Sweet muffins	58	43	15	19	106	12.2
7. Ovenable fish or chicken portions	56	34	22	36	95	10.5
8. Cakes or sweet biscuits	43	34	9	3	122	10.5
9. Pizza	76	52	24	39	60	9.1
10. Confectionery	31	27	3	6	140	8.6

Table 6 (overpage) was constructed to view the ten most commonly sold items across school classification categories. It is evident from the table that the most commonly sold items are consistent across school classification categories, but with a few notable exceptions listed here:

- sushi and toast sales are more common to combined primary and secondary schools;
- regular soft drinks sales are more common to district high schools and senior high schools;
- Lebanese, pita breads, and wraps are more common to district high schools;
- potato crisp sales are more common to senior high schools; and
- confectionary sales are more common among primary schools and senior high schools.

Table 6: Ten Most Commonly Sold Foods During 'Survey Week' According to School Classification

Rank	Primary Schools Only	Combined Primary & Secondary Schools	District High Schools	Senior High Schools
1	Ice-creams or icy-poles	Milk – flavoured	Pies, pasties, or sausage rolls	Milk – flavoured
2	Pies, pasties, or sausage rolls	Ice-creams or icy-poles	Ice-creams or icy-poles	Ice-creams or icy-poles
3	Milk – flavoured	Pies, pasties, sausage rolls	Milk – flavoured	Soft drinks – regular
4	Ovenable fish or chicken portions	Fruit juices other than 100%	Fruit juices other than 100%	Pies, pasties, or sausage rolls
5	Muffins – sweet	Sandwiches or rolls	Sandwiches or rolls	Fruit juices other than 100%
6	Pizza	Muffins – sweet	Soft drinks – regular	Confectionery
7	Confectionery	Cakes or sweet biscuits	Muffins – sweet	Cakes or sweet biscuits
8	Fruit juices other than 100%	Sushi	Lebanese, pita breads or wraps	Muffins – sweet
9	Sandwiches or rolls	Ovenable fish or chicken portions	Cakes or sweet biscuits	Sandwiches or rolls
10	Cakes or sweet biscuits	Toast	Ovenable fish or chicken portions	Potato crisps

Similarly, Table 7 (overpage) was constructed to provide an understanding of differences between metropolitan and regional schools in the most commonly sold items. From the table, it appears that it is only confectionery that is more commonly sold in metropolitan schools, and 100% fruit juices in regional schools.

Table 7: Top Ten Food Items Commonly Sold During 'Survey Week' According to Location

Rank	Metropolitan Schools	Most Commonly Sold Index	Regional Schools	Most Commonly Sold Index
1	Icecreams or icy-poles	26.9	Milk – flavoured	29.2
2	Milk – flavoured	24.5	Pies, pasties, or sausage rolls	21.3
3	Pies, pasties, or sausage rolls	23.6	Icecreams or icy-poles	19.0
4	Fruit juices other than 100%	12.1	Sweet muffins	16.2
5	Ovenable fish or chicken portions	11.5	Sandwiches or rolls	14.7
6	Pizza	10.7	Fruit juices other than 100%	12.5
7	Sandwiches or rolls	10.5	Ovenable fish or chicken portions	10.4
8	Sweet muffins	10.1	Pizza	8.1
9	Confectionery	9.9	Cakes or sweet biscuits	7.9
10	Cakes or sweet biscuits	9.4	Fruit juices – 100%	6.1

3.5 Canteen menu planning

A comparison of the current canteen survey results with those from surveys undertaken in 1996 and 2000 show that there has been little change over the years in the proportion of schools with (66%) or without a canteen policy (34%) although within that there has been a shift to more schools with a specific canteen policy. Results of the current survey also indicate that the input into canteen decisions are still made by the canteen committee and canteen organiser in most schools, although more schools seem to have parents involved in canteen decisions currently than in years past (see Table 8 below).

Table 8: Canteen policy and decision-making

	1996 % of schools	2000 % of schools	2006 % of schools
School canteen policy			
School had a policy that includes the canteen	44	35	33
School had a specific canteen policy	20	31	33
School had no specific canteen policy	32	28	34
Who made decisions regarding the canteen menu?			
Canteen Committee	62	69	43
Parent Body	16	20	24.5
School Board/Council	3	5	6
Canteen Organiser/Supervisor	62	64	58
Principal	17	14	18
Other	9	4	9

Of the 527 respondent schools to rank their top three reasons for providing the choice of foods available in their canteens, 86% ranked 'nutrition and health concerns' among their top three reasons. The next four most common reasons indicated were: popularity amongst students (64%); ease of preparation (60%); value for money (56%); and parental requests (16%). Fourteen percent of schools provided and ranked in their top three a reason not belonging to the list of survey

options. The reasons that were repeated in sufficient quantity to be coded were: availability of food (6%), P & C fundraising (3%), ease of transport (2%).

Of particular interest when comparing these results with the results from canteen surveys in 1996 and 2000 is that a significantly higher proportion of schools currently identified 'new food on the market' and 'religious or cultural factors' among their top three reasons than have done in previous years. These findings may be reflective of a broader societal shift towards greater awareness and accommodation of diversity, realised in school canteens more specifically in terms of food provision.

Eighty-eight percent of 515 respondent schools indicated that they undertook strategies to promote healthier food choices. While there were no outstandingly popular means for promotion across all schools, the results indicate that a moderate proportion of schools used a variety of strategies. The most common five strategies used were: subsidising the cost of healthier menu choices (49%); arranging special promotions, such as 'meal deals' (47%); advertising in the local newsletter (44%); organising special events, such as a sports day (39%); and posters in the canteen and/or around town.

The most common factors that *prevented* canteens from providing healthier food choices in 2005 were identified as: a lack of parental support (20%); a lack of volunteers (19%); a lack of time (17%); and too much wastage (11%). These are considerably low proportions as 75% of respondents indicated that there were no factors preventing the provision of healthier food options in their school. *Enablers* to provision of healthier food options were much more commonly identified. The most prevalent of these were: knowledge of the childhood obesity problem (53%), easy access to healthier food choices (46%); support from teaching staff (41%); requests from parents (41%); and training courses (41%).

The data gathered through the survey regarding the extent to which peanut products are currently available in canteens was unclear. This was due to unusually low responses on the relevant three questions pertaining to peanut products. Seventy-three of 156 respondents (43%) indicated that they sell foods containing peanuts/nuts/nut products; while 108 of 188 respondents (57%) indicated that they sell foods containing peanut butter/nutella. Sixty-three of 145 respondents (43%) indicated that they sell foods containing confectionary peanuts/nuts/nut products as listed ingredients. In light of the low response numbers to these survey items (around 13% of all WA schools), one would be firmly cautioned against making inferences to the population.

Much clearer results, however, were found that indicated a relatively large proportion of school canteens: (1) do not sell food supplied by fast food franchises (89%); (2) receive free services or cash-back incentives from at least one food supplier (71%); and (3) are aware of the WA School Canteen Association's Star Choice food registration program (90%).

3.6 Management and financial issues

Table 9 shows the majority of school canteens: (1) are aware of the Star Canteen Accreditation Program (STARCAP); (2) generally employ between one and three staff, but depending of the size of the canteen can employ upward of six; (3) generally have 1-40 volunteers assisting in the operation of the canteen, although in a small proportion of schools the volunteer numbers are in excess of 60; and (4) have a canteen manager with a relevant qualification.

Table 9: Management of School Canteens in 2005

	% of responses
Aware of the Star Canteen Accreditation Program (STARCAP)	
Yes	88
Did your canteen employ staff?	
1	35
2	23
3	11
4	4
5	4
6 or more	2
Total	78
Did your canteen have volunteers?	
1- 10	31
10-20	22
20-40	17
40-60	8
More than 60	3
Total	81
Did the manager have any qualifications?	
TAFE School Canteen Management Certificate	16
Qualified Cook/Chef	2
Hospitality industry qualifications	5
Completed School Canteen Food Service Short Course Training (STARCAP)	21
On the Job Experience	27
Total	71

A comparison of volunteer numbers in school canteens from the present data with the data from the WA School Canteen Association surveys conducted in 1996 indicates over the 10-year period, while the proportion of schools with canteen volunteers has increased (71% in 1996 to 81% in 2006), proportionately fewer schools currently have larger numbers of volunteers (i.e. in excess of 20). This may indicate that volunteer numbers on the whole are declining, but further longitudinal data would be required to substantiate this.

Seventy-four percent of 445 respondent schools returned a net surplus from their canteen service in 2005, although 86% did not set a percentage target for their profits. A significantly higher proportion of schools with over 500 students (90%) reported returning a net surplus from their canteen than schools with under 200 students (60%). This means that 40% of schools with under 200 students have canteens that did not return a net profit in 2005.

As indicated earlier, the findings for schools with under 200 students are closely aligned with findings for schools in regional areas. Thirty-three percent of schools in regional areas also reported a net loss in 2005. This is not surprising given that large proportion of schools with under 200 students are schools in regional areas (55% compared to the population figure of 41%).

It appears that schools with larger student numbers view their canteens as businesses in which profit can be achieved with some regularity, as 41% of schools with over 1000 students plan a percentage profit for the year. Fewer than 20% of school with smaller student numbers set a percentage target for profit.

4. DISCUSSION

School canteens or food service provision are a significant part of schools as evidenced by the high proportion of schools reporting that they had a canteen or a food service (88%). Most canteens and other food services provide both a recess and lunch service for five days of the week. Any policy introduced for school canteens will therefore be affecting a significant part of school life.

School canteens in public schools are largely operated by the school Parents and Citizens Association (P&C) which are independent bodies from the school and the Department of Education and Training. Therefore, policy for school canteens should have the support of WACSSO, the peak P&C representative body.

Other key stakeholders include external contractors that operate an onsite canteen or owners of local shops that deliver a food service to schools where the school manages the contract or has negotiated the food service. Food services provided by local shops were found to be more common in regional areas and especially for schools in regional areas with fewer than 200 students. Any policy should also take into account how these stakeholders will meet the requirements.

Overall, the majority of school canteens or food services reported providing a range of healthy food and drinks every day they were open. These healthy foods and drinks included: sandwiches or rolls (80% of schools); yoghurt and yoghurt varieties (74%); bottled water (71%); Lebanese, pita breads and wraps (52%); salad trays (64%); 100% fruit juices (64%); whole fresh fruit (61%); and plain milk (54%).

Only a minority of school canteens or food services reported providing food and drinks that are excessive in energy and low in nutrients every day the canteen was open. These food and drinks included: soft drinks (7%); hot chips or wedges (11%); potato crisps (18%); and confectionery (27%). However, the pattern of what is available differs slightly across different school classification categories with the most notable difference being that soft drinks are available in almost only schools with secondary students (i.e. District High Schools and Senior High Schools).

The results also indicate that a minority of schools did not have healthy food such as sandwiches, rolls, or fresh fruit available every day the school canteen traded. However, the total proportion of schools reporting that they offer these foods for sale is likely to be an underestimation as not all respondents answered the corresponding question. This may be due to the detailed nature of the question requiring more time than some respondents could make available to complete the survey.

Concern is warranted regarding the types and quantities of food sold in school canteens because even given the range of healthy food available every day and restrictions on some less healthy foods, the less healthy food items appear to be most popular with students. Ranking of the food and drinks according to those most commonly sold across all schools with a canteen or food service shows that in the ten most commonly sold food and drink items include: ice-creams or icy-poles; pies, pasties or sausage rolls; sweet muffins; ovenable fish or chicken portions; cakes or

sweet biscuits; pizza; and confectionery. While there are healthier versions of these types of foods, it should be noted that a significant proportion of respondents, across these food items, did not indicate that they provide Star Choice versions of these products.

While the pattern of what is most commonly sold was largely similar across all school classification categories there were some concerning differences: soft drinks are high on the list of most commonly sold items for District High Schools and Senior High Schools; and confectionery was high on the list for Primary Schools and Senior High Schools.

With the exception of sandwiches and rolls which were the fifth most commonly sold food items and arguably flavoured milk (because it provides a source of calcium and low fat milk is often used) which was most common of all, healthy food options such as salads, salad trays, and vegetables were low on the list of commonly sold items. Whole fresh fruit and 'fruit presented in other ways' were situated approximately mid-range in terms of the most commonly sold.

It is clear that across all schools more needs to be done to increase students' purchasing of healthy food from the canteen or food service. A key to these changes is evident from the lists of factors stated by respondents as enablers and barriers to providing healthier food choices. Respondents cited 'nutrition and health concerns' as motivating factors for their choice of foods and 'knowledge of the childhood obesity problem' as motivation for introducing healthy foods. This is consistent with 'training' being cited by 41% of respondents as a key enabler. It seems that increased knowledge about health and nutrition could facilitate changes.

Respondents' concern for 'ease of preparation' and 'value for money' in food choices can be coupled with their citing 'a lack of time' and 'too much wastage' as barriers to providing healthier food choices. Therefore, policy for healthier canteen food must take into account the real pressures for time and efficiency in a canteen service.

In addition, a significant proportion of canteens that reported a net loss in 2005 were in schools with less than 200 students (40%) and in schools in regional areas (33%). Support for policy implementation should therefore be ensured for canteens in small schools and in regional schools.

Another key implication is for the role of parents in supporting changes. Respondents stated that a lack of parent support was a barrier and that requests from parents was an enabler to healthier food choices. In addition, support from teaching staff was also often cited as an enabler. It seems that support from the school community that includes parents and teachers is a key to healthier food in canteens.

P&Cs employ paid staff to work in school canteens but many canteens also rely on volunteer assistance. A comparison with data from previous canteen surveys show that the number of volunteers has continued to decline with a third of all schools reporting that they have only 1 – 10 volunteers. Respondents also stated that a lack of volunteers was a barrier to providing healthier food choices. This is related to the 'lack of time' barrier described earlier as volunteers assist in food preparation and service. Policy requirements should consider the realities of a declining source of volunteer support for school canteens.

Appendix A

Table 10: Food Items Sold During 'Canteen Week' Ranked in Order of Availability

Food Item	Food Available Through Canteen (% of Schools)	Food Available Everyday the canteen traded (% of Schools)	Food Available Only Sometimes (% of Schools)	Is a Star Choice Registered Product (% of Schools)	Average Quantity Sold per 500 Students
Sandwiches or rolls	84	80	3	43	88
Pies, pasties, or sausage rolls	82	46	35	46	159
Milk – flavoured	79	77	2	36	200
Yogurt and yoghurt varieties	78	74	5	41	44
Ice-creams or icy-poles	77	71	6	36	184
Pizza	76	52	24	39	60
Bottled water	74	71	2	40	45
Lasagne, spaghetti or other pasta	70	43	27	44	31
Salads – trays	70	65	6	33	14
Burgers	68	35	33	40	53
Fruit juices other than 100%	67	65	2	22	120
Fruit juices 100%	67	65	2	37	57
Hot dogs	67	34	33	32	40
Whole fresh fruit	67	61	6	29	24
Lebanese, pita breads, or wraps	61	52	9	31	54
Sweet muffins	58	43	15	19	106
Hot meat rolls e.g. chicken, beef	57	35	22	28	32
Ovenable fish or chicken portions	56	34	22	36	95
Milk – plain	56	54	1	32	19
Fresh fruit in other forms	52	44	8	24	32
Soup	50	37	12	20	27
Popcorn	48	39	9	26	24
Cakes or sweet biscuits	43	34	9	3	122
Vegetables	42	29	12	22	17
Other packet savoury snacks	35	32	3	22	43
Confectionery	31	27	3	6	140
Salads – other	29	27	2	14	22
Nachos	28	11	17	8	29
Flavoured mineral water	27	26	1	9	110
Muesli bars or other 'health' bars	24	22	2	10	26
Yeast buns or fruit bread	23	15	8	6	45
Potato crisps	22	18	3	9	94
Hot chips or wedges	22	11	10	7	74
Liquorice	22	20	1	3	52
Toast	18	14	5	7	79
Cough lollies	18	16	2	1	30
Sushi	16	8	8	9	80
Sports drinks	14	12	1	5	126
Soft drinks – diet or no sugar	10	9	1	2	103
Soft drinks – regular	8	7	1	0	318
Breakfast cereal	8	6	2	3	32
Lentil burgers	3	2	1	1	17
Cordial	2	2	0	0	99

Table 11: Food Items Sold During ‘Canteen Week’ Ranked in Order of Most Commonly Sold

Food Item	Food Available Through Canteen	Food Available Everyday the canteen traded	Food Available Only Sometimes	Is a Star Choice Registered Product	Average Quantity Sold per 500 Students	Most Commonly sold Index
	(% of Schools)	(% of Schools)	(% of Schools)	(% of Schools)		
Milk – flavoured	79	77	2	36	200	31.7
Ice-creams or icy-poles	77	71	6	36	184	28.3
Pies, pasties, sausage rolls	82	46	35	46	159	25.9
Fruit juices other than 100%	67	65	2	22	120	16.0
Sandwiches or rolls	84	80	3	43	88	14.8
Muffins – sweet	58	43	15	19	106	12.2
Ovenable fish or chicken portions	56	34	22	36	95	10.5
Cakes or sweet biscuits	43	34	9	3	122	10.5
Pizza	76	52	24	39	60	9.1
Confectionery	31	27	3	6	140	8.6
Fruit juices – 100%	67	65	2	37	57	7.6
Burgers	68	35	33	40	53	7.2
Yogurt and yoghurt varieties	78	74	5	41	44	6.9
Bottled water	74	71	2	40	45	6.6
Lebanese, pita breads, or wraps	61	52	9	31	54	6.6
Flavoured mineral water	27	26	1	9	110	6.0
Hot dogs	67	34	33	32	40	5.3
Soft drinks – regular	8	7	1	0	318	5.0
Lasagne, spaghetti or other pasta	70	43	27	44	31	4.4
Potato crisps	22	18	3	9	94	4.0
Hot meat rolls e.g. chicken, beef	57	35	22	28	32	3.6
Sports drinks	14	12	1	5	126	3.4
Fresh fruit in other forms	52	44	8	24	32	3.3
Whole fresh fruit	67	61	6	29	24	3.2
Hot chips or wedges	22	11	10	7	74	3.2
Other packet savoury snacks	35	32	3	22	43	3.0
Toast	18	14	5	7	79	2.9
Soup	50	37	12	20	27	2.7
Sushi	16	8	8	9	80	2.5
Popcorn	48	39	9	26	24	2.3
Liquorice	22	20	1	3	52	2.2
Milk – plain	56	54	1	32	19	2.1
Soft drinks – diet or no sugar	10	9	1	2	103	2.1
Yeast buns or fruit bread	23	15	8	6	45	2.0
Salad trays	70	65	6	33	14	2.0
Nachos	28	11	17	8	29	1.6
Vegetables	42	29	12	22	17	1.4
Salads – other	29	27	2	14	22	1.3
Muesli bars or other ‘health’ bars	24	22	2	10	26	1.2
Cough lollies	18	16	2	1	30	1.1
Breakfast cereal	8	6	2	3	32	0.5
Cordial	2	2	0	0	99	0.4
Lentil burgers	3	2	1	1	17	0.1

Notes:

1. The 'Most Commonly Sold Index' does not use the actual number of items sold per students in the schools that sell the item. The reason for this is that an estimate produced by removing extraneous variance across the 'number of items sold' variable is a more conceptually and statistically sound method to enhance the accuracy of inferences made to the population from the sample. The estimates were produced through an Analysis of Covariance (ANCOVA), in which 'the number of students' variable was used as the covariate for the 'number of items sold' variable.

It is not unusual that this aspect of statistical inference is overlooked in research such as this. The key message is that using raw scores to make population inferences would produce exactly the opposite effect of what we wish to achieve – it would decrease the accuracy of inferences made to the population rather than increase it relative to the estimates produced through the use of an ANCOVA.

Appendix B



Department of Education and Training
Government of Western Australia

SURVEY OF NUTRITIONAL VALUE OF FOOD SOLD IN SCHOOL CANTEENS

School canteens play an important role in ensuring better student health by providing healthy food and demonstrating and reinforcing the health and nutrition curriculum.

This survey is part of an initiative by the Government to encourage more healthy food in school canteens. Its purpose is to gather information about the types and quantities of foods and beverages sold in all school canteens including vending machines and at 'breakfast programs'. The survey asks for information about:

- i) canteen operation in **2005**; and
- ii) the number of food and beverage items sold in the "**survey week**" **Monday, 15 May to Friday, 19 May 2006**.

This survey is based on one conducted by the Western Australian School Canteen Association and HealthWay in 1997 and 2001. Completion of this survey will provide up-to-date information about the food sold in school canteens and will inform new strategies to increase healthy food in schools.

The survey is anonymous and no individual schools will be identified. No identifying information is requested on the survey. However, please return the survey in the coded, addressed envelope provided as this enables tracking of which schools have replied. All schools that return the survey in the envelope provided by **2 June 2006** will have the envelope entered in a draw for **\$1000.00** for the school Parents and Citizens Association (or canteen committee) to use for the school canteen or educational purposes.

Who should complete the survey? Both the principal and the person who has management responsibility of the school canteen, eg canteen organiser/supervisor, canteen committee and/or P&C Association. If the school does not have a canteen, the survey should be completed by the principal, registrar or bursar.

Demographic details:

- A. Which of the following best describes your school? (*Please tick one*)
1. Public 2. Catholic 3. Independent
- B. Number of students
- C. Is the school co-educational? (*Please tick one*)
1. Yes 2. No (all boys) 3. No (all girls)
- D. Type of school (*Please tick one*)
1. Primary only (includes community kindergartens and pre-schools)
2. Combined primary/secondary (eg K-12)
3. District high school
4. Senior high school, secondary college or middle school (eg Yr6/7-9/10)
5. Other (*please specify*).....
- E. Location of your school: (*Please tick one*)
1. Metropolitan area
- Regional area - please specify:
- | | |
|---------------------------------------|---|
| 2. <input type="checkbox"/> Albany | 3. <input type="checkbox"/> Bunbury |
| 4. <input type="checkbox"/> Esperance | 5. <input type="checkbox"/> Goldfields |
| 6. <input type="checkbox"/> Kimberley | 7. <input type="checkbox"/> Mid West |
| 8. <input type="checkbox"/> Midlands | 9. <input type="checkbox"/> Narrogin |
| 10. <input type="checkbox"/> Pilbara | 11. <input type="checkbox"/> Warren-Blackwood |

Availability of food service in 2005:

Q1 Were students permitted to go off campus to purchase food? Yes No

Q2 Did your school operate a food service for students and staff? Yes No
(If yes, please continue to next question)
(If no, please go to Q13a, 13b and then Q26)

Q3 Which best describes your food service in **2005**? *(Please tick one)*

1. Full meals – boarders only
2. School canteen/tuckshop – day students only – operated by school
3. School canteen/tuckshop – day students only – operated by Parents and Citizens' Association
4. School canteen/tuckshop – day students only – operated by external / commercial organisation under contract
5. Combined full meals (boarders) and separate school canteen
6. Food prepared by another school canteen
7. Food provided by retail outlet (eg school shop, delicatessen, service station, cooperative) delivered to school

Q3a If you ticked 6 or 7 above, did the school have any input into the range of food, beverages and snacks available to students? Yes No

Canteen operation in 2005:

Q4 How many days per week did the canteen trade? 1 2 3 4 5

Q5 When was the canteen open? *(You may tick more than one box)*

1. Before school for sale of food items
2. Before school to take orders
3. Morning recess
4. Lunch
5. Afternoon recess
6. After school

Q6 Which best describes your **LUNCH SERVICE**? *(Please tick one)*

1. Pre-ordered food
2. Self-service food
3. Part pre-ordered, part impulse bought food

Canteen menu planning in 2005:

Q7 Who made decisions regarding items to be included on the canteen menu? *(Tick all that apply)*

1. <input type="checkbox"/> Canteen committee	2. <input type="checkbox"/> Parent body	3. <input type="checkbox"/> School board/council
4. <input type="checkbox"/> Canteen organiser/supervisor	5. <input type="checkbox"/> Principal	6. <input type="checkbox"/> Other (please specify)

.....

- Q8 Which statement best described your school during **2005**? (*Please tick one*)
1. School had a health policy that included the canteen
 2. School had a specific canteen policy
 3. School had no specific canteen policy

Q9 Please rank 1, 2, 3 the **most important** reasons for choice of food offered for sale at your canteen in **2005** (1 means the highest importance was placed on this factor).

1. Religious or cultural factors
2. Ease of preparation
3. Popularity among students
4. Nutrition and health concerns
5. Parent requests
6. New food on the market
7. Value for money
8. Others (please specify).....
-
-

Q10a. During **2005** did your school promote healthier food choices? Yes No

If you answered yes, which of the following means were used:

1. Subsidising the cost of 'healthier' menu choices eg selling fresh fruit or salads at a reduced/no profit margin
2. 'Catchy' names for food items
3. Advertising in school newsletter
4. Posters in canteen and/or around the school
5. Special promotions eg 'meal deals'
6. Special events eg sports day
7. Other (please specify).....

Q10b. Have any factors stopped your school's canteen from providing healthier food choices?

1. No – because...
 - 1.1 already sell plenty of healthy choices
 - 1.2 other reason (please specify)

.....

2. Yes

If yes, please specify from list below (tick all that apply)

- 2.1 Competition from local shops that sell unhealthy foods
- 2.2 Special deals from distributors for less healthy food
- 2.3 Can't get easy access to healthy food products due to supply/delivery issues
- 2.4 Lack of demand from students
- 2.5 Lack of support from parents
- 2.6 Lack of support from canteen staff
- 2.7 Lack of support from canteen committee
- 2.8 Need to make profit – selling healthier food is less profitable
- 2.9 Have tried – too much wastage
- 2.10 Lack of time to prepare – more labour intensive
- 2.11 Lack of volunteers
- 2.12 Healthy food is too expensive to buy in to the canteen
- 2.13 Problems with water supply to premises – specify
- 2.14 Lack of storage space
- 2.15 Lack of suitable equipment – specify
- 2.16 lack of preparation area
- 2.17 lack of display space
- 2.18 other, please specify

- Q10c. Have any of the following things helped your school's canteen to provide healthier food choices? (*tick all that apply*)
1. Networking with other schools in the area (eg network meetings)
 2. Assistance from health professionals
 3. Support from teaching staff
 4. Requests from parents
 5. Training courses
 6. Easy access to healthier food choices
 7. Knowledge of the childhood obesity problem
 8. Special deals on healthier food products
 9. More storage space available
 10. Promotions of healthier food products or 'meal deals'
 11. Suitable equipment now available
 12. Other, please specify
-

Q11 Are you aware of the WA School Canteen Association's Star Choice food registration program? Yes No

Q12 What were the three most popular and least popular items on your canteen menu during **2005**? (Include all food and drinks offered at both recess and lunch time.)

Most popular	Least popular
1	1
2	2
3	3

The types of food/drinks and the numbers of each type sold in your canteen in the "survey week" Monday, 15 May to Friday, 19 May 2006.

Q13a. Firstly, is the "survey week":

1. a typical week at your school?
2. an atypical at your school (eg sports carnival, camp week)?

If the survey week is an atypical week at your school please answer Q13c for the closest week for which you have records.

Q13b. Is a "breakfast program/club" operating at your school? (Please do not include situations where food is sold by school canteens before school). Yes No

If yes:

1. Who implements the breakfast program/club?.....
 2. Who funds the breakfast program/club?.....
 3. Please state the **type** of food items, and the **number** of each item, provided in the breakfast program in the "survey week":
-
-
-
-
-

Q13c. For each food/drink item below, please tick the appropriate boxes and record the numbers of that type of food/drink sold in the “survey week” **Monday, 15 May to Friday, 19 May 2006**. Please include all items sold through the canteen (before, during and after school) and through vending machines.

Food type	Is this food available at all? Place a tick if available , a cross if you do not stock the item.	Tick if item was available every day the canteen traded .	Tick if item was available some-Times .	Tick if this is a Star Choice registered product or if a Star Choice registered product is used in the preparation of the item.	Please record the numbers sold in the survey week including all food/drinks sold through the canteen and vending machines .
Toast					
Breakfast cereal					
Yeast buns/fruit bread					
Muffins – sweet					
Cakes/sweet biscuits					
Fresh fruit – whole					
Fresh fruit – in other forms					
Yoghurt, Yogo, Fruche, etc.					
Confectionery eg lollies, chocolate bars					
Cough lollies					
Liquorice					
Muesli bars and/or other ‘health’ bars					
Potato crisps					
Other packet savoury snacks eg corn chips					
Popcorn					
Soup					
Sandwiches/rolls					
Sushi					
Salads – trays					
Salads – other eg tubs					
Vegetables – fresh/frozen other than salad (eg corn, jacket potatoes)					
Lebanese/pita breads / wraps					
Pies, pasties, sausage rolls, party pies					
Burgers (eg hamburger, chicken, fish)					
Lentil burgers					
Hot dogs					
Pizza					
Lasagne/spaghetti and/or other pasta					
Ovenable fish/chicken portions					
Hot meat rolls eg chicken, beef					
Hot chips/wedges					
Nachos					
Icecreams/icy poles					
Soft drinks – regular					
Soft drinks – diet or no sugar					
Bottled water					
Flavoured mineral water					
Sports drinks					
Fruit juices – 100%					
Fruit juices – other (eg 35%)					
Milk – plain					
Milk – flavoured					
Cordial					

Q13d. Please list any food or drink items not covered in Q13c which are sold in significant quantities by your canteen and for each please record the same information.

Food type	Is this food available at all? Place a tick if available , a cross if you do not stock the item.	Tick if item was available every day the canteen traded.	Tick if item was available some-Times.	Tick if this is a Star Choice registered product or if a Star Choice registered product is used in the preparation of the item.	Please record the numbers sold in the survey week including all food/drinks sold through the canteen and vending machines.

Canteen operation in 2005:

Q14 Does your canteen sell food containing any of the following? *(tick all relevant)*

1. Peanuts / nuts / nut products
2. Peanut butter / nutella
3. Confectionary peanuts / nuts / nut products as listed ingredients

Q15 Does your canteen sell food supplied by any fast food franchises? Yes No
If yes, please indicate how often:

Q16 Does your school receive any free goods or services or cash-back incentives from any food suppliers? Yes No
If yes, please detail:
.....
.....

Q17 Please indicate the classification class of your canteen under the current food hygiene regulations:
1. Class 1 (extensive food preparation permitted)
2. Class 3 (restricted preparation / heat and serve)

Management/financial:

Q18a. Are you aware of the Star Canteen Accreditation Program (STARCAP)? Yes No

Q18b. 1. Has your canteen been accredited under STARCAP? Yes No
2. If yes, please indicate the level achieved: 3 Star 4 Star 5 Star

Q19 Do you employ paid staff to operate the canteen? Yes No
If yes, please indicate number of staff employed
1 2 3 4 5 Over 5

Q20 1. Does your school rely on volunteer help to operate the canteen? Yes No
2. If yes, how many canteen volunteers **in total** does your school have?
1-10 10-20 20-40 40-60 Other

Q21 How many volunteers are needed **daily**?..... (please insert number)

Q22 Does the canteen organiser have any special qualifications? Yes No
If yes, please tick which best describes those qualifications:
1. TAFE School Canteen Management Certificate
2. Qualified cook/chef
3. Hospitality industry qualifications
4. Completed School Canteen Food Service Short Course
5. Course training (STARCAP training)
6. On the job work experience. Number of years

Q23 Did the canteen make a net surplus **in 2005**? Yes No

Q24 What was the gross turnover of the canteen **for 2005**? \$:00

Q25 1. Did your school have a set percentage of profit required on turnover **for 2005**?
Yes No
2. If yes, which best describes the margin required:
1. 5% 2. 5-10% 3. 10% 4. 10-15% 5. Over 15%

Q26 Do you have any comments that you feel may be relevant to our survey?
.....
.....
.....

Thank you for your time in completing this questionnaire.

PLEASE RETURN YOUR COMPLETED SURVEY IN THE ENVELOPE PROVIDED TO:

REVIEW OF NUTRITIONAL VALUE OF FOOD IN SCHOOL CANTEENS
STRATEGIC POLICY AND PLANNING
DEPARTMENT OF EDUCATION AND TRAINING
151 ROYAL STREET, EAST PERTH WA 6004

Please return surveys by **2 June 2006** in the envelopes provided and your school will be placed in a draw for **\$1000.00** for the school P&C Association (or parent body or canteen committee if there is no P&C) to use for the school canteen or educational purposes. The surveys are anonymous but the envelopes are coded and will be used in the draw.

You are encouraged to include your school canteen menu, with or without school identification, as new ideas for healthy food items and innovative menu layouts can assist in promoting healthy canteens.