



LiveSmart
healthy lifestyle solutions

**Recommendations
for
Mt Lawley SHS Canteen, 2006**



Congratulations for taking this initiative to improve the health of your students and staff. We are very impressed with your dedication and the efforts you have made so far to have a healthy school canteen. Assisting you in this project is a pleasure.

We have reviewed recommendations and resources from the following organisations:

- World Health Organisation - Draft Global Strategy on Diet, Physical Activity and Health
- WA Department of Health
 - FOODcents
 - Crunch & Sip™
- Commonwealth Department of Health and Ageing
 - Australian Guide to Healthy Eating
 - Dietary Guidelines for Children & Adolescents
- Nutrition Australia - Healthy Eating Pyramid
- WA Health Promoting Schools Association
- Heart Foundation
- CHIP (Coronary Health Improvement Project)
- WA School Canteen Association Inc - StarCAP
- Appleton Central Alternative School (Wisconsin, USA) – see *Appendix 1*

Our recommendations are primarily based on the Department of Health's FOODcents principles, incorporating elements from other models as appropriate, to provide a sound basis for achieving a balanced diet, which reflects our understanding of your vision for your new 'healthy' canteen. The FOODcents 'traffic light' colour-coding helps to readily identify the three sections of the Health Eating Pyramid, ie. Eat Most, Eat Moderately, Eat Least.

The FOODcents 10-Plan (attached) recommends spending the food budget as follows:

- 60%** on foods in the green sections (ie. plant foods)
- 30%** on foods in the orange sections (ie. animal foods)
- 10%** on foods in the red sections (ie. highly processed foods)

Go: Eat Most/Spend Most

Bread, cereal foods, fruit, vegetables and legumes

Note: Legumes are unique in that they are the only food type that appears in two of the sections (protein and vegetable) pictured on the plate model of the Australian Guide to Healthy Eating¹ (attached). Ideally, legumes should be eaten almost daily².

Caution: Eat Moderately/Spend Moderately:

Lean meat, chicken (without skin), fish and eggs, nuts, milk, cheese, yoghurt.

Apply Brakes: Eat least/Spend Least:

Butter, margarine, oil, sugar, salad dressings, sauces, biscuits, cake, soft drink, chips/crisps, pies, pizza, pastries, burgers, fatty meats, chicken with skin, chocolate, confectionary, fruit juice, cordial, coffee and tea.

Currently more than half (53%) the Australian food budget is spent on foods that don't form the basis of a healthy diet (foods high in fat, sugar and salt - Eat Least foods), which is more than five times the 10% recommended by FOODcents. Less than a quarter (21%) is spent on fruit, vegetables, breads, plain cereals and legumes compared to the recommended 60%. Australians, therefore, need to spend almost three times as much on these Eat Most foods. Paradoxically, instead of costing more, it will be cheaper! Following the 10-Plan will help to achieve a balanced diet, adding an estimated 10 years to life³ and save up to 25% on food costs. (An average family of four can save over \$2000/year on their food bill by following the 10-Plan).

¹ Commonwealth Department of Health and Ageing

² FOODcents Diet Quiz, WA Department of Health

³ Department of Health, FOODcents Adviser Manual

Recommended Food List (colour-coded according to FOODcents guidelines)

Breakfast

Wholegrain cereals*, toast, baked beans (reduced salt) and other legume dishes, fruit, low fat milk (including soy).

Spreads (use sparingly).

* Cereals without dried fruit may contain up to 10g of sugar per 100g. Cereals containing dried fruit may contain up to 20g of sugar per 100g.

Breads

A variety of wholemeal/wholegrain* breads and rolls, including pita, English muffins, Lavash, Lebanese, Focaccia, bagels, gluten-free options, etc.

Some of these are not available in wholemeal, but we have found that bakeries are willing to take orders for wholemeal options (eg Baker's Delight).

* Multigrain bread is usually white bread with kibbled grains, which is why we haven't recommended it. See Appendix 2 for percentages of nutrients lost when wheat is refined. Note that fibre-enriched white bread would still be devoid of other nutrients that were lost during refining.

Sandwich Fillings

Variety of salad items (including sprouts), avocado, creamed corn, hummous (without added oil), hummous variations (ie. substituting other legumes), baked beans (reduced salt), date and banana lean meat, lean chicken (no skin), fish in spring water, egg, cheese (reduced fat),

Vegemite/yeast spreads (use sparingly).

Fruit

Fresh fruit in season (whole or cut portions), fruit salad, frozen or canned fruits (unsweetened).

All may be served with low fat fruit yoghurts (including soy) as dip.

Drinks

Water*

Fresh fruit smoothies (made of pureed fruit with fruit juice)

Fresh fruit smoothies (made of pureed fruit with milk/soy milk) reduced fat milk (including soy).

100% fruit juice

* Water is the preferred drink (8-10 glasses daily⁴ is minimum for ages 13 and up). Use of other beverages tends to compromise this ideal.

Salads

All garden vegetable mixtures, bean mix, tabbouli, brown rice, potato, coleslaw, Waldorf, (all with modest amounts of low fat/salt dressings), chunky vegetable sticks/pieces (can be served with low fat/salt dip)

Hot Foods

Jaffles, hot rolls, toasted sandwiches (eg. tomato, creamed corn, reduced salt baked beans), toasts (bread, muffins), baked potatoes (cooked in skins, split and filled with one or more of the sandwich fillings above or Mexican Beans), brown rice (vegetable risotto or plain boiled, served with a liberal amount of vegetables), low fat/salt patties (vegetable, legume) with cooked vegetables or salad or in wholemeal burgers with liberal salad, reduced fat/salt soups or stews (vegetable and/or legume), wholemeal pasta with reduced fat/salt toppings (eg. Napolitana Sauce), cooked vegetables.

toasted sandwiches (eg. reduced fat cheese and tomato, reduced fat cheese, lean meat, skinless chicken, fish in spring water, egg), vegetable risotto with cheese, low fat/salt patties (meat, chicken, fish) with cooked vegetables or salad or in wholemeal burgers with liberal salad, reduced

⁴ Department of Health, Crunch & Sip™ website

fat/salt soups or stews containing lean meat, wholemeal pasta with reduced fat/salt toppings (eg. Bolognese Sauce).

Miscellaneous

bruschetta (no oil or cheese), freshly made popcorn (plain), brown rice cakes, dried fruit, frozen fruit smoothies (icypoles made of pureed fruit with fruit juice)

dried fruit/seed mixes, bruschetta with reduced fat cheese (no oil), low fat yoghurt/soy yoghurt (fresh, frozen, plain or fruit), wholemeal plain or fruit scones, frozen fruit smoothies (icypoles made of pureed fruit with milk/soy milk)

icypoles (100% fruit juice), low fat wholemeal muffins

Other

- Every day the canteen needs to provide vegetarian options (no eggs and dairy), as well as considering the cultural and religious preferences of the students and staff (eg. halal, kosher, etc).
- Nuts provide many health benefits, but we have not included them because of your school policy regarding allergies.
- This “traffic light” system of identifying supermarket foods by coloured shelf strips is being used by Boronia Prison and a remote Aboriginal community. We recommend that the canteen pricelist/menu uses the traffic light colours to guide students in making healthier choices – or at least create awareness. We can assist with this.

What the Department of Health is recommending is not radical – the way Australians are eating is radical, with the consequence that 60% of deaths are diet related.

Results of government research⁵ on primary school aged children in Western Australia found that, on any given day:

- Four out of 10 eat no fruit
- Three out of 10 eat no vegetables
- Half eat confectionary

The proportion of overweight children has tripled in the last 20 years:

- one in four boys are overweight
- one in three girls are overweight

Children are now experiencing diseases previously only found in adults, as reported in the following newspaper headlines:

- Children of 10 at heart risk⁶
- Obesity surgery for teens⁷

Poor nutrition impacts not only health, but behaviour and learning also. Well-nourished children concentrate and perform better. Their mental, physical and social function is improved.⁸

We look forward to working with your team to help make Mt Lawley Senior High School a ‘lighthouse school’.

⁵ Department of Health, Crunch & Sip™ website

⁶ Sunday Times, 14-8-05

⁷ Sunday Times, 4-7-04

⁸ World Health Organisation

Appendix 1

Appleton Central Alternative High School, Wisconsin, USA

Typically, while school dietitians want children to eat healthier food, they are convinced such efforts will be futile, and if students cannot get their fast food in the cafeteria they will buy it off campus. This does not appear to have been a problem in Appleton where, since 1997, the food is not only natural, it is prepared with care; Natural Ovens made sure of this by hiring and training the cooks for the school.

For several weeks, the kids ate healthful foods, though somewhat reluctantly but once the teens made the connection between food, behaviour and learning, they tended to prefer to enjoy the benefits. One student said, "I really like the food. It tastes good, it's hot, it's fresh." Returning students are now the advocates for the program.

Appleton Principal, LuAnn Coenen, is amazed at the change she has seen in her school (for "developmentally challenged" students). Each year principals are required to file a report with the state of Wisconsin, detail the number of students who have dropped out, been expelled, been found using drugs, carrying weapons, or who have committed suicide. Five years after the start of the program she reported that the numbers in every category had been "zero" every year.

The school provides a natural breakfast and lunch [see next page for menu]. No outside food/drink is allowed into the school. 95% of students participate (the remaining 5% don't eat while at school – some only attend in the morning or afternoon, as they also have jobs).

Foods are all freshly prepared, low in fat, salt and sugar, and all free of chemical additives, artificial flavours and colourings. Nothing is fried or greasy. No hydrogenated fats are used. Burgers, fries and burritos have been replaced with salads, meats using only healthy recipes, and whole grain breads. Fresh fruits and vegetables are provided. Water is available throughout the day. The other beverages are low fat milk and energy drink mixes (made fresh daily with a variety of fruits and flax-based energy powder). The school has no soft drink and junk food machines.

Several weeks after implementation of the healthy eating program, the students had a "reward" day with fizzy drinks, confectionary and other junk food. Accounts of that day range from nuclear to merely ballistic. The kids were manic, the teachers were harried. But more important, the kids didn't feel well, and said they wanted to feel good again.

"The brain, the principal organ of the mind and nervous system, is also the master of the body, controlling essentially all functions. At the same time, the brain is totally dependent on such support systems of the body as the digestive, respiratory, circulatory, and excretory systems. When viewed in this way, it is clear the human organism is a single unit. We don't just have a mind; we are a mind. All body tissues support the brain and its function. The highest functions of the mind: discrimination, memory, judgment, self-control and willpower are the most sensitive to any disturbance in the body."⁹

"The main causes of compromised frontal lobe function are improper lifestyle habits. The front part of the brain can either be enhanced or compromised by our habitual choices . . . and can affect, in essence, who we are."¹⁰

Six Years Later:

Far from proving "too hard", in 2003 the Appleton district approved a nutrition plan incorporating many of the changes at Appleton Central Alternative School to be phased into its 25 schools that

⁹ Dr William Dysinger

¹⁰ Dr Neil Nedley

serve 15,000 students. There is a district-wide commitment to healthier eating and lifestyle in general. Appleton Central Alternative School can certainly be called a "Lighthouse School".

Appleton Menu

The Breakfast Program consists of the following items:

Bottled water, 100% juice, skim milk, and a blended energy drink. The energy drink is made fresh daily with a variety of fruits, juices and Natural Oven's flax-based energy drink powder (with omega 3)

A variety of whole grain bagels, breads and muffins - all of which are free of additives, dyes, artificial preservatives, and saturated fats

Granola cereal [Muesli]

Fresh peanut butter, natural fruit preserves, Promise margarine

Fresh fruits including bananas, apples, pears, oranges, plums, seasonal fruits, etc.

The Lunch Program includes the following:

Bottled water, 100% juice, skim milk, and a blended energy drink. The energy drink is made fresh daily with a variety of fruits, juices and Natural Oven's flax-based energy drink powder (with omega 3)

A variety of whole grain bagels, breads and muffins - all of which are free of additives, dyes, artificial preservatives, and saturated fats

Salad Bar: dark green lettuce (no iceberg head lettuce), cherry tomatoes, carrot sticks, cucumber slices, sliced mushrooms, black olives, peanuts, sunflower seeds, broccoli and cauliflower spears, shredded carrots, diced boiled eggs, croutons made from whole grain breads, home-made apple sauce, shredded cabbage, peach and pear slices, pineapple chunks, and fruit salad

Hot Entree: Central offers no a la carte items. Two on-site cooks prepare the meals daily, and no food is prepared by frying in a grease product. Meat products used include lean pork, chicken, turkey and fish (no beef). A variety of spices, soymilk products and tofu are used as natural flavour enhancers in many of the recipes. Because we participate in the National School Lunch Program (NSLP), we need to offer milk; however, no other dairy products are utilized. In addition, we qualify for and receive federal commodities, selecting only offerings that are nutritious and not heavily processed.

For more on the CAHS nutrition program, visit their web site at:
<<http://www.aasd.k12.wi.us/aca/nutrition.htm>>

Percentages of Nutrients Lost in Refining of Wheat

B1 (thiamine)	85-95%
B2 (riboflavin)	70%
B6 (pyridoxine)	85-95%
Niacin	85-95%
Biotin	85-95%
Iron	85%
Folic Acid	70%
Calcium	50%
Manganese	70-80%
Magnesium	70-80%
Copper	70-80%
Phosphorus	70-80%
Protein	27%
Antioxidant phenolics	99.5%
Vitamin E	95%