



Healthy School Food Policy

The purpose of this brief is to:

- Alert Pacific Island countries and territories (PICTs) to the impact of unhealthy food choices on children's health and development
- Examine the benefits healthy school food policies can provide children and governments in the Pacific
- Highlight school food policy options for government departments and schools
- Share examples of effective policy interventions from around the Pacific as well as lessons learned from their implementation



The Double Edged Sword: Obesity and Malnutrition in Pacific Children

Unhealthy school environments play a supportive role in the development of childhood obesity and vitamin deficiencies that have serious consequences for children's health and academic performance. Short term impacts of poor nutrition choices and obesity include lower academic performance, poor school attendance, behavioural and social problems. In the long term childhood obesity harms nearly every organ in a child's body including the heart, bones and kidneys leaving them prone to non-communicable diseases (NCD's) such as diabetes and heart disease in adulthood. Already, many Pacific Islands have declared obesity and resulting NCD's epidemics and the severity of the problem has triggered the World Health Organisation (WHO) to classify childhood obesity as one of the most serious public health challenges of the 21st century. With overweight and obesity likely to follow children into adulthood the Pacific NCD crisis is only set to intensify in the future. This crisis negatively impacts economic, health and social development in all Pacific societies.

Currently Pacific children are amongst the largest in the world, though this extra body weight doesn't mean they are over nourished as diets often consist of calorie dense, refined carbohydrate foods with very little vitamin content. As a result Iron and vitamin A deficiency remain common amongst Pacific children. In fact the latest data shows that in the Solomon Islands, Nauru, Fiji and Tuvalu over 40% of children are anaemic, often as a result of Iron deficiency, classifying as a severe public health concern. Vitamin A deficiency is also a public health concern in Papua New Guinea, Kiribati and Federated States of Micronesia. These deficiency's leave children more susceptible to illness and infection, increasing absenteeism and reducing school performance by impairing children's cognitive and physical development. With 40% of Pacific Island children not completing basic primary education and 1.4 million illiterate adults, preventing nutrition related illnesses could have a significant impact on education outcomes in the region.

Childhood Obesity

A Growing Pacific Problem

High fertility rates ensure growing populations throughout the Pacific, though as this young generation ages early onset obesity means they face a greater risk of chronic, lifelong health conditions than we have ever experienced.

In Samoa one in five babies are classified as obese by the age of just 15 months [\[link\]](#) while over 50% of adolescents in Tonga, Cook Islands, Samoa and Niue are overweight and up to 30% obese (GSHS Results).

Childhood obesity is a result of caloric imbalance where too few calories are expended (through exercise and movement) in relation to calories consumed (through foods and drink). This imbalance is affected by genetic, behavioural and environmental factors. While genetic factors are involved in Pacific obesity, school health surveys show high levels of adolescent overweight and obesity have a strong correlation with lifestyle risk factors such as high soft drink consumption, low fruit and vegetable intake, low levels of physical activity and extended periods of sitting (GSHS Results).

Although comparative data is limited, available results paint a worrying picture of a rapidly growing problem. For example the Fiji National Nutrition Survey identified a 10% rise in the rates of obesity in under 18 years olds over just 10 years (from 4.5% in 1993, to 14.5% 2004). Coinciding with these findings, risk factors for obesity have also increased, for example the consumption of Sugar Sweetened Beverages (SSBs) doubled between 1997 and 2007. Increasing supply in the Pacific mean there are now over 392 different SSBs available and in countries such as American Samoa youths are consuming over 12 servings of SSB a week. (Snowden 2013)

"Good health supports successful learning. Successful learning supports health. Education and health are inseparable"

- Dr Desmond O'Byrne

Healthy Food for Healthy Futures

Children spend much of their waking day at school making around 50% of their daily nutrition choices while there. Substantial evidence indicates healthy food choices and practices are linked with learning readiness and success, as well as fewer discipline and emotional problems. The school environment impacts on many of the factors which determine children's food choices such as knowledge of food and health, availability, affordability, popularity of food choices, peer pressure and food advertising. By influencing all these factors schools have the choice to play a part in the problem, or the solution of childhood obesity.

For example a recent Pacific study identified that cost, heavy marketing, high availability in schools and limited access to safe water were main drivers of SSB intake (Snowden 2008). Therefore bans on SSB marketing and supply in schools complimented by increased access to clean water could, theoretically, reduce a major risk factor for many Pacific Island children's health.

In choosing to be part of the solution schools can encourage children into active lifestyles and varied diets full of Pacific grown foods. Healthy school food policies are the most effective way to ensure adherence and full school coverage of strategies in the prevention of vitamin deficiencies and childhood obesity.

Not only impacting on their immediate food intake, these school food policies can impact on their food choices throughout life. Research has found that after introducing healthy school policies teachers have reported improved attendance, attention, behaviour, and levels of concentration in the classroom https://www.researchgate.net/publication/325000000_Effectiveness_of_school_food_policies_in_Pacific_Islands. Significant reductions in children's Body Mass Index, as well as their behavioural risk factors (increased fruit and vegetable intake, physical activity and reducing consumption of SSB's) have also been as a result of healthy school food policies. These improvements are a positive indication that by targeting nutrition through schools we can help stem the rising tide of NCD's that are crippling health services, draining countries finances and straining family finances and wellbeing.

School Food Policies

School Food Policies can encompass many different areas based on the individual schools identified needs and capabilities to address both the curriculum and food environment. It can also be an overarching policy for all schools set by the Ministry of Education. Creating a nutrition policy provides direction and evaluation strategies to improve pupils health. Many healthy events and one off activities such as 'fruit and water days' can promote nutrition. However, research has shown to achieve sustainable healthy changes in children's diet and health 'whole school' approaches to health promotion are needed to involve staff, parents and pupils in creating health policies that become a fundamental part of the schools practise.

Key factors to the success of School Food Policies include the adequate provision of resources and information from the MoE and MoH. Most importantly however is the individual schools motivation to implement the policy. The more people consulted and the greater the collaboration between staff, parents and pupils the greater the outcomes of any school food policy.



Education and Health: Collaboration breeds Success

For truly effective and sustainable health outcomes in schools support from both the Ministry of Education (MoE) and the Ministry of Health (MoH) is needed. Together they can provide both the legal standing and technical assistance required for the development, implementation and evaluation of healthy school food policies.

A memorandum of understanding (MoU) between the two is the first step in successful collaboration. Countries such as Fiji, Cook Islands, FSM, Nauru and the Marshall Islands already have active MoU's between health and education departments. In order to achieve the goals of these memorandums both government departments should work to establish healthy school settings as part of their strategic plans as well as establishing co-ordinating committees to direct and evaluate health efforts in schools.

Collaboration is evident in shared resource production and promotion, as well as health training for teachers to create a foundation for healthy schools and provide schools with accessible and consistent information. The MoE's involvement also encourages better compliance with school food policy's as they can make compliance mandatory.



The following initiatives can be standalone policies, or requirements of overarching nutrition policies.

Food Advertising in Schools

Leading players in the food industries target school areas through advertising of Sugar Sweetened Beverages (SSB's) and junk foods. Research consistently shows that children exposed to unhealthy food advertising are much more likely to select, request and eat unhealthy foods. Governments can create policies that ban these advertisements and sponsorship agreements occurring in schools to reduce children's exposure. They can also create a guide for schools to gain sponsorship through healthier avenues such as banks and retail companies.

Currently some governments have signed MoU's with food companies. While this is a positive move problems can arise in the implementation. For example in Fiji the Ministry of Health has an MoU with the Fiji Beverage Group stating they will not conduct direct advertising in child-directed media where 50% or more of the audience is under 12 years old. This is a difficult audience parameter to measure. It also allows for direct marketing to over 12 year olds resulting in events such as the Coca-Cola games which creating an unhealthy association between physical activity and SSB's. Furthermore the MoU allows the Beverage Company to break the agreement upon special request from schools administration.

_____ With stricter policies put in place by the MoE countries can replicate international results and eliminate the advertising of unhealthy food in schools, reducing children's exposure and demand for these foods.

Water Only Policy

SSB's (fizzy drink, soda, juice, flavoured milks) provide no nutritional value and significantly increase children's risk of dental carries and obesity. Implementing a 'Water Only' policy in all schools is a simple way for the MoE to effectively reduce a major health risk factor without placing financial strain on parent or schools.

In countries such as Palau, Water only Policies means teachers and students are prohibited from bringing or selling any SBBs to the school grounds and water consumption is encouraged in almost all schools. Results have found that 82% of parents feel the initiative is "somewhat" or "very successful" _____. There has also been an increased market for healthy alternatives using local fruits which canteens can sell to avoid profit loss. Following the Policy's introduction the Youth Risk Behaviour Survey found a dramatic reduction in the amount of SSB consumed by high school students, from 37.6% in 2007 to 26.3% in 2011. It should be noted that the crucial elements in the success of this initiative was strict enforcement by schools on both the ban of unhealthy drink options and the increased availability of water. In many PICT's health departments have also developed supportive health communication messages to encourage swapping SSB's for healthy alternatives which can be used by schools to support Water Only Policies. In some countries additional measures to discourage food vendors from selling near schools will also be needed. Based on their success, Palau is now investigating an additional ban on foods high in fat, sugar and salt.

Nutrition Education in the Curriculum

In today's food environment myths, advertising and social norms around convenience foods mean healthy eating is not an intuitive practice. Schools are a crucial avenue to educate and empower children to maintain a healthy diet through life.

PICT governments have the authority to implement compulsory nutrition education curriculum standards. Training, content development and enforcement support from MoE and MoH's can help schools ensure all children are equipped with adequate food and nutrition knowledge as well as practical skills such as cooking and gardening for healthy futures. Recommended Curriculum Components:

Classroom lessons should focus on culturally relevant food and nutrition information and cover the three pacific food groups, nutrition guidelines, the dangers of packaged foods and the benefits of locally grown foods as well as how what we eat positively or negatively impacts our body with relation to physiology and health.



'The 'no junk food policy' at school has reached home and parents have contacted the school with surprise that children are not asking for sweets when parents go to town but have asked for fruits instead.'
- Health Promoting Schools coordinator,
Rabulu Primary School, Fiji

Facing an alarming rate of childhood and adult obesity the Cook Islands MoE took action for a healthy future by creating the Cook Island Health and Physical Well-being curriculum alongside the MoH. The curriculum focused on educating children on all areas of health including nutrition, sexual health, mental wellbeing and physical activity. Implementation involved professional development, resource development and providing schools with support in the planning and evaluation of programs. In French Polynesia a suite of education materials has also been developed by government health departments to assist teachers in promoting healthy diets.

Practical learning activities specifically school gardens and cooking demonstrations. Growing evidence shows involving children in these activities reduce their risk of NCD's through increased fruit and vegetable intake and nutritional knowledge.

In Fiji Bureta Primary School has developed a simple system where by pupils drop their pawpaw seeds in the same spot, encouraging pawpaw trees to grow. These pawpaw trees are given to families in the village to improve access to fresh pawpaw, boosting their fruit intake and providing a great source of Vitamin A _____ At Andrews Primary School in Nadi students use outdoor gardening as a learning process to show what can be done in their own backyard- teaching them seasonal planting and harvesting techniques. The garden is cared for primarily by the students with the help of the school gardener and works as an income generator for the school as they sell their produce to parents and at the local markets which also helps students learn financial skills _____



Benefits of School Gardens

- ✓ Increases children's fruit and vegetable intake
- ✓ Increases children's willingness to try new fruits and vegetables
- ✓ Teaches children traditional methods of gardening and cooking
- ✓ Educates children on sustainability, ecology and maths
- ✓ Reduces reliance on imported and packaged foods
- ✓ Provides children with practical life skills
- ✓ Shapes their taste preferences to favour healthy fruits and vegetables
- ✓ Creates an opportunity for light to moderate physical activity
- ✓ Improves academic performance
- ✓ Reinforces classroom nutrition classes

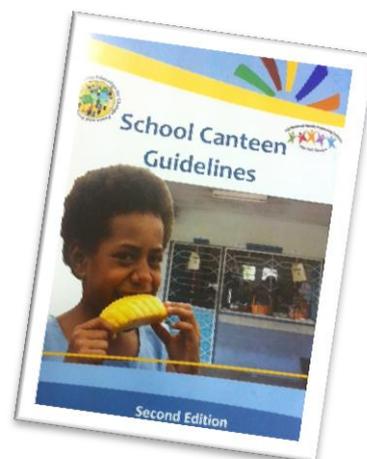
Food in Schools

In Pacific Islands such as Guam financial support from the United States Department of Agriculture makes School Lunch Programs possible where children are provided a free or subsidised cost lunch at school. While this program addresses short term food security issues, concerns have been raised about the lack of locally sourced foods provided. For example in the Federated States of Micronesia the previously run school lunch program is considered to be a major contributor in the shift away from traditional diets of nutritious locally sourced root crops and fresh fish, towards imported low nutrient options such as rice and tinned fish. School food programs are also very expensive for schools and governments to maintain without financial support.

School Canteen Guidelines

School canteens primary objective is the nourishment of children. However current trends indicate profit and convenience are taking precedence leading the sale of unhealthy food products high in sugar, salt and fat. By working with school canteen managers and providing guidance to schools MoE's and MoH's can help create healthy school canteens to nourish children at school.

The Fiji School Canteen Guidelines were published in 2005. Despite widespread distribution and the MoE declaring the guidelines mandatory in 2009, a 2012 study found that only 16% of schools were complying with the guidelines. Interestingly they also identified schools who were complying with the guidelines showed significantly lower rates of overweight and obese students (32% vs 40%) _____ Reasons for non-compliance include lack of awareness of the importance and impact of healthy canteens by canteen staff, teachers and principals. As a result of these findings the revised, second edition canteen guidelines were released in 2013 with greater direction on what foods to serve.



Health Promoting Schools (picture will symbolise HPS being a basket to hold all school health activities/ Policies)

The WHO definition of a Health Promoting Schools (HPS) is "a school that is constantly strengthening its capacity as a healthy setting for living, learning and working". The HPS approach addresses all health concerns of children, including food and nutrition, to improve the health and wellbeing of students. Adopting the HPS framework involves a whole school approach- including parents, staff and most importantly children to develop and support health promoting policies- including the school nutrition policy options outlined above. Currently HPS's are running throughout the Pacific Islands with great results in terms of fruit and vegetable intake, physical activity, reduced soft drink intake and improved health education.

Conclusions

- ✓ Well planned and enforced School Food Policies can reduce the risk of under and over nutrition in the Pacific by promoting healthy lifestyles and reducing lifestyle risk factors for our children to prevent NCD's
- ✓ Success of school food policies relies on collaboration by MoE and MoH to equip schools with the resources and information needed to drive policy change
- ✓ Motivation from schools is absolutely crucial in empowering all children with the knowledge and opportunity to make healthy food choices everyday
- ✓ All policies should include curriculum and environmental components

- ✓ Practical activities such as school gardens have multiple benefits including healthy life skills, healthy school environments and improved academic performance as well as maintaining and educating children in traditional Pacific practises
- ✓ Foods such as SSB's provide children with no nutritional benefit and can be eliminated from schools through simple restrictions to great effect as long as healthy alternatives (e.g water) are also made available.