

Review Article

Globalisation, food and health in Pacific Island countries

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Pacific Island countries (PICs) are experiencing an epidemic of obesity and consequent chronic diseases. Despite investment in the development of National Plans of Action for Nutrition (NPANs) and interventions to promote healthy eating and physical activity, nutritional status appears to show little improvement. This paper presents a synthesis of the findings from two research papers that were prepared for a 2003 food safety and quality meeting in Nadi, Fiji. The findings indicate that although lifestyle behaviours might be the immediate cause of dietary imbalances, greater attention should focus on omnipresent influences of globalisation as a critical element of the nutrition transition in the Pacific. In particular, those aspects of globalisation mediated through the World Trade Organization (WTO) Agreements that are placing pressures on food security and fostering increased dependence on imported food of poor nutritional quality. Rapid, significant and sustainable improvements in public health in PICs require interventions that can tackle these underlying contributors to ill health. There are opportunities to explore the use of food regulatory approaches to influence the composition, availability and accessibility of food products. Within the context of the WTO Agreements the legitimacy of food regulatory approaches will depend upon the case to demonstrate the relationship between the intervention and the protection of food security and public health nutrition. The challenges in realising these opportunities are: 1) to have the capacity to construct a case, 2) meet the technical and financial demands to administer and enforce regulatory approaches, and 3) to take advantage of opportunities available and to be able to fully participate in the international policy-making process.

Key Words: nutrition, globalisation, food regulation, food security, Pacific.

Introduction

Although most Pacific Island countries (PICs) have been settled recently (1,500-8,000 years ago), some are believed to be among the world's oldest food cultures with consumption patterns dating back over 28,000 years.¹ However, over the last 100 years, demographic, lifestyle and food supply changes influenced by European contact and domination in trade and development, have taken place with exceptional speed resulting in a nutrition transition and an apparent decline in population health.²

As a consequence of the transition process, once self-sufficient countries have become economically and food dependent on developed countries. Most Pacific Island Countries (PICs) populations are experiencing an epidemic of obesity and suffering simultaneously high rates of both communicable and non-communicable diseases. This double burden of disease is now further exacerbated by a food supply that encourages consumption from a limited 'universal menu' of goods and services.³ Other authors have described this as the "triple burden" of disease.⁴

As global interdependence accelerates, health systems and regulatory instruments have also become globalised into a monoculture of ideologies and policy that may not reflect Pacific disease patterns or health needs.⁵ In the area of global food trade, the World Trade Organization (WTO) Agreements and the Codex Alimentarius Commission's (Codex) food standards have been established as uniform

international rules and provisions that assist the development of national food and health legislation.⁶⁻⁸

Since 1992 many PICs have invested in the development of National Plans of Action on Nutrition (NPAN) and regional meetings to implement food security and health protection measures in the Pacific. Most of the implementation objectives and outcomes have been based on population behaviour change to promote healthy eating and physical activity levels. However, the rates of nutrition-related chronic diseases appear to be increasing whilst food security is declining.⁹⁻¹¹ Is this influenced by the global international food supply, health and regulation systems? If so, what can be done to protect and improve health and how can it be achieved?

This paper documents and describes the Pacific food supply and the links between globalisation and declining health in PICs in terms of the nutrition transition, and then discusses opportunities and challenges to help protect public health nutrition and food security in the context of the WTO Agreements.

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It is based on two research papers presented at the FAO, SPC and WHO Consultation on Food Safety and Quality in Fiji in November 2002.¹² The first was a comprehensive literature review of 135 publications on diet, food, nutrition and health in the Pacific together with an analysis of food balance sheets for seven Pacific countries from 1961-2000.¹³ The second paper was an analysis of the appropriateness, acceptability and implications of regulatory approaches to control the flow of fatty foods into Pacific Island countries.¹⁴

Nutrition, health and the food supply

There is mounting evidence of a strong link between importation of foods of low nutritional quality and increasing rates of disease.^{10,13,15} For many of the small, dispersed countries of the Pacific, there is concern about international trading in food, especially the effects that consumption of imported foods has on health in terms of food quality and safety; and the increasing level of dependence on food imports has on food security.

Allegations of food “dumping” have been made against food exporting countries such as Australia, New Zealand and the USA.^{16,17} Among the foods in question are high-fat products such as mutton-flaps, turkey tails, chicken backs and corned beef. Commentators have variously termed the health-damaging effects of low-quality food imports as “dietary colonialism”,¹⁸ “Coca-colonisation”¹⁹ and “dietary genocide”.²⁰

An extensive review of diet, health and the food supply in the Pacific indicates that traditional food patterns were nutritionally adequate and a good source of vitamins and minerals.¹³ Some of the first Europeans to visit the Pacific described the people as strong, muscular and healthy leading some early writers to describe life on the Pacific islands as “primitive affluence”.²¹ Contact with Europeans not only introduced infectious diseases causing massive epidemics of infectious diseases but also introduced the culture of competition, rivalry and the promotion of a free-market based economic system that dominated the mainly non-confrontational, ecologically

balanced island economies. The review identified six common factors that correlated with recent adverse health outcomes. They were; urbanisation, dietary change, low population physical activity levels, lack of government policy, food dependence and aid; and acceptance and/or belief that foreign goods and services are superior.¹³

It appears that the development of malnutrition in the South Pacific has been a product of urbanisation.²² Classical forms of malnutrition in traditional subsistence economies before colonisation were uncommon. Repeated nutrition surveys undertaken in Fiji from 1951-1970 substantiate this.^{23,24} There is no name in the indigenous languages for malnutrition. The first reports of malnutrition (beri beri) were found in indentured labourers from China who lived mainly on imported foods, especially polished rice.²⁵

There is evidence to show health differences between those who consume imported foods and those who consume locally prepared foods. A 1998 survey undertaken in Vanuatu showed that rural populations consumed more total calories than urban populations but were much less obese. The proportion of energy as fat consumed from imported foods was 44.8% for urban populations and only 8.4% for rural and semi-rural populations. It was determined that people were 2.2 times more likely to be obese and 2.4 times more likely to be diabetic if they consumed fat from imported foods rather than from traditional fat sources, such as coconuts. Individual imported foods providing fat were identified as vegetable oils, margarine, butter, meat and chickens, canned meat and canned fish.²⁶

Food supply data for seven Pacific nations showed that total available energy and fat has increased in all countries since 1963¹³ (Fig. 1). Figure 1 shows much greater increases in the availability of fat than energy between 1963 and 2000. This is because imported fats and oils have been *added to* existing fat sources such as coconuts whilst traditional carbohydrate energy sources such as root crops, fruits and vegetables have been replaced by imported cereal products (flour and rice), meat, alcohol and milk.

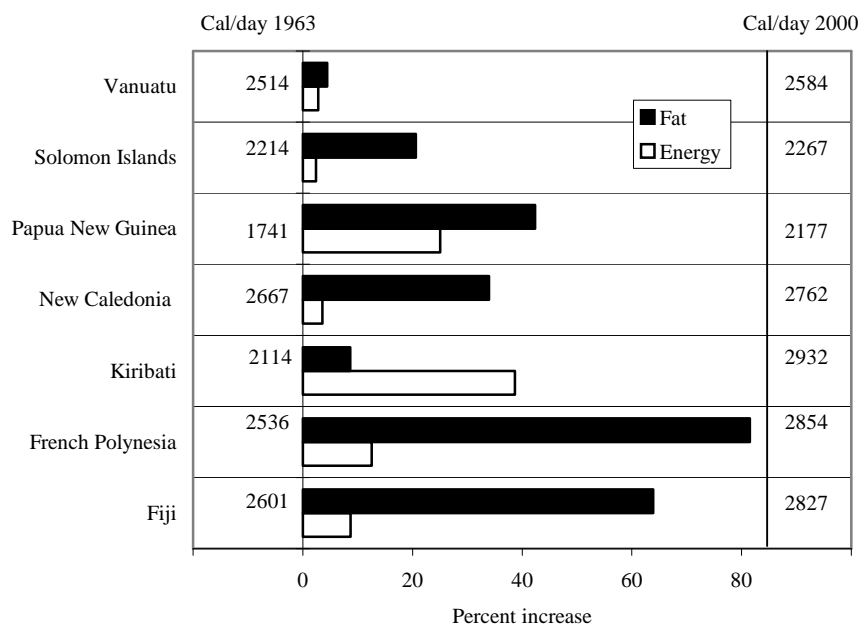


Figure 1. Total energy and fat increases (per capita per day) in the food supplies of selected Pacific countries 1963-2000

The largest single increase in meat products has been the importation of chicken meat (not including turkey tails). Food dependence is now a way of life for Pacific countries. This was first identified by McGee (1975) who noted that PICs faced four major threats.

1. Food imports make up an increasing proportion of overseas exchange purchases and negative balances were met by overseas aid thus, increasing dependence.
2. The dietary change brought about by increased food imports has created nutrition problems that were not apparent before colonisation.
3. Food imports have limited the possibilities for growth of indigenous food production for cash sale because the population of urban centres were growing at the expense of rural expertise in food production.
4. Economic growth as a consequence of consuming imported foods makes people "worse off" because they have entered a dependent relationship with suppliers that will always make them "better off".¹⁸

These four threats constitute a situation in which countries are not in full control of their food supplies that, in turn, puts their food security under the control of foreign interests.

Global influences

Results from the review have shown that the consequences of consuming from the global menu have aided the dispossession of Pacific communities of control of their food supply, food cultures and governance.

Control of a food system is an instrument of dominion.¹³ Imported rice, bread and noodles are now the leading Pacific staples, not local taro and yam. Fatty imported meats are the leading sources of protein, not seafoods. Sugar and confectionaries have replaced island fruits and starches. PICs are now consuming from a very limited 'universal menu' of reduced diversity and choice.

It is one of the end products of a global food production and distribution system where blocs of high-income countries design and use political and economic policies to control and expropriate low-income countries.^{3,27,28} This is the new colonialism. Concerns about the flow of high-fat foods in PICs have been widely and consistently expressed by government officials. The Samoan Minister of Health, Mulitalo Siafausa, has been quoted as saying that there is a need to ban fatty mutton flaps and turkey tails, "but the government is looking at joining the World Trade Organization ... so if we banned these products, it will interfere with policies of WTO."²⁹ Similarly, when referring to New Zealand aid, the Tongan Prime Minister has commented:

"We should not be under any illusion that they do this for our own good, we remind ourselves that Aid does not solely benefit us as a country, but Aid benefits the donor as well. One example would be that they give us aid and they dump mutton flaps on the Tongan market; mutton flaps that are hardly edible by the health standards of New Zealand".³⁰

These comments resonate with the view of McMichael and Beaglehole who state that the core objective of globalisation is not better health but the ascendancy of deregulated markets in international trade and investment.³¹ Other authors have described the trade in unsafe and low nutritional quality foods as increasing the spread of infectious and lifestyle diseases, and threatening food security by undermining local food production causing structural food shortages, unemployment, malnutrition, loss of skills and increased crime.¹⁵ Has the rapid adoption of cheap, energy-dense, high-fat foreign foods made a significant contribution to declining health, food security, sovereignty and the decline of traditional family values as identified by Cannon (2003)¹⁰? The very isolation of PICs had been their protection. Isolation forced

Table 1. Factors contributing to ill health in Pacific island countries

Underlying Origins	Direct (apparent) Causes	Ill health
<i>Socio-cultural/Political</i>	<i>Living Conditions/urbanisation</i>	<i>Communicable diseases</i>
Colonial contact and exploitation, loss of culture, land, identity, sovereignty, power	Poverty Overcrowding	Increased diarrhoea, gastro-entero infections, and viruses,
Increased dependence	Inadequate housing standards	Trachoma & eye disease, ear disease
Decreased self-determination	Inadequate sewerage and sanitation	Respiratory diseases & infections
Reduced responsibility over own life	Inadequate water supply	Renal diseases, skin sores & infections
	Poor hygiene	Increased VBDs, STDs
	Family food insecurity	
<i>Economic</i>	<i>Lifestyles</i>	<i>Non-communicable diseases</i>
Inadequate/inappropriate education and employment	Insufficient nutrition and diet	Obesity, diabetes, hypertension, heart disease, respiratory disease, gout, lung, brain and liver damage, cancer, mental health
Lack of meaningful activities, and occupations	Consumption of foods of low nutritional quality	
Perception and acceptance that all foreign goods and services are superior	Inadequate physical activity	
	Tobacco and alcohol overuse	
	High levels of mental stress	Low/high birth-weight,
	Reliance on foreign aid	Violence, accidents, social disruptions
<i>Demographic</i>	<i>Health Services</i>	<i>Health services</i>
Small, dispersed, remote, multi-lingual, multi-tribal and mobile population groups	Late presentation/diagnosis and treatment	High hospitalisation rates
	Under/over-utilisation of services	More severe illness
	Focus on treatment rather than prevention	More chronic illness

communities to be self-sufficient and thus, independent. This independence was based on malleable food systems and natural resources that 'rolled with the punches' of ocean, climate and environment. For generations PICs have existed on the geographic and economic fringes of international trade and development and were little affected because Pacific cultures and cuisines were self-sufficient and diverse. Globalisation, the new global monoculture, reduces cultural diversity to the lowest common denominator of "least effort" lifestyles characterised by physical inactivity and convenience. The fundamental causes are environmental changes in global affairs.³

This leads us to ask the question: what is the root cause of disease among Pacific islanders? It appears that no disease has a single cause or one type of direct cause but is a combination of contributing genetic and environmental factors.³² The removal of the immediate causes of disease does not eliminate the disease because these may be merely influences and symptoms of a deeper, underlying origin. The known causes of ill health in terms of living conditions, lifestyles and underlying origins in PICs are presented in Table 1.

Although Table 1 is a vast simplification of the complexity of factors that link socio-cultural and political factors with disease, it does serve as a model that attempts to provide a framework for a better understanding of the issues involved. These deeper underlying socio-cultural and political origins of disease seem to be linked by a common theme of dispossession. The globalisation process has at times contributed to this dispossession through the inappropriate administration of international agreements that have subsequently reduced the independent governance and political power of PICs. Changes in national, international and global affairs that increase any of these underlying causes are also likely to change disease patterns.²⁷

Many of the direct causes of ill health listed in Table 1 were recognised in the 1992 FAO/WHO World Declaration on Nutrition to be eliminated or reduced before 2002 but paragraph 17 acknowledges compensatory support for developing countries to counter the effects of trade liberalisation and structural adjustment programs.⁶ Furthermore, the recently accepted WHO Global Strategy on Diet, Physical Activity and Health included a clause stating that nothing in the strategy should be construed as a justification for the adoption of trade-restrictive or trade-distorting practices.³³ The plan recognises the impact of diet and a lack of physical activity on the increase in non-communicable diseases but not the underlying origins.

Opportunities and challenges for protecting food security and nutrition in PICs in the face of globalisation

The assessment in the previous section has highlighted that ill health in many PICs is a consequence of a complex pattern of factors. The direct cause of ill health may be lifestyle behaviours but the underlying origins are socio-cultural and political factors influenced by the omnipresent forces of globalisation. In the area of food

trade, globalisation issues are generally mediated through the WTO Agreements.

Governments have a diversity of instruments available to help achieve food and nutrition policy objectives.³⁴ Many nutrition education interventions have been implemented in PICs, however in isolation such interventions are unlikely to be sufficient to improve food security and nutritional status. There is a need to complement nutrition education with policy instruments that can target the origins of the ill health and create supportive environments for behaviour change.

Food regulation is a particularly strong policy instrument that can be used to influence the composition, availability and accessibility of food and help protect food security.³⁵ In addition, food standards have an important role in controlling the quality of the food supply in terms of preventing fraud and deception and protecting against safety concerns. Before developing and implementing food regulation it is important to understand the WTO Agreements since international trading obligations and commitments can impact upon national food regulation. Food regulatory approaches must be considered within the context of the food trade obligations and commitments of national governments. There are three WTO Agreements that are of particular relevance to national food and health policy in Pacific Island countries and they are outlined in Table 2. The three Agreements are:

1. The Agreement on Agriculture.
2. The Agreement on Sanitary and Phytosanitary Measures.
3. The Agreement on Technical Barriers to Trade.

In 2004, there were three PICs who were WTO Members: Fiji, Papua New Guinea and Solomon Islands. The majority of the PICs are not WTO Members and hence are not bound by its rules and provisions. Non-members of the WTO may have greater flexibility in pursuing regulatory approaches that influence their food and nutrition systems. However, trade restrictive behaviours may expose nations to retaliatory measures, including restricted access to development aid and diminished participation in other political agendas. Also, observer governments to the WTO that do not abide by the rules and provisions of its agreements may damage their prospects for future WTO membership (an observer government is one that is in the process of acceding to WTO membership; in 2004 this included Samoa, Tonga and Vanuatu).

There are three broad groupings of regulatory approaches that can be implemented either individually or collectively to help moderate negative health impacts of aspects of global food trade on domestic food supplies and food consumption patterns and are summarised in Table 3. These three groupings of regulatory approaches are:

1. Restrictions on the supply of certain foods.
2. Pricing controls on foods.
3. Food labelling requirements.

When the original multilateral trade agreement, the General Agreement on Tariffs and Trade (GATT), was prepared it made special reference to the importance of taking into account national public health policy objectives in the decision-making process of trade negotiations.³⁶ A 2002 joint WHO-WTO study that examined

the WTO Agreements and effects on public health affirmed that the health protection principle espoused in the GATT is relevant in the context of the current WTO Agreements.⁷ However, some commentators assert that the rules and provisions prescribed in the WTO Agreements serve to promote food trade practices contrary to public health interests and obstruct the development of food regulatory approaches that might help protect food security and nutrition.^{10,11}

The key requirements for constructing a case for each of the three groupings of regulatory approaches and the feasibility of the cases' acceptance against the rules and provisions of the WTO Agreements are discussed below. This paper is not able to offer definitive assessments on the appropriateness of regulatory approaches. Such assessments require knowledge of the available scientific

evidence associated with a particular situation and the need to place circumstances into perspective. Additional technical information is available in a WHO publication on this topic.³⁷

Restrictions on the supply of certain foods

Import bans, quotas, prohibitions on domestic sales and composition standards are technical regulations that fall under the TBT Agreement. An example of a regulatory approach to restrict the supply of a certain food is the 1999 Fijian Cabinet decision that the meat derived from the belly of sheep (lamb flaps) be prohibited from domestic sale by issue of an order³⁸ under the provisions of the Fair Trading Decree 1992. The favourable assessment of these regulatory approaches depends on adherence with requirements included in Article 2 of the TBT Agreement.

Table 2. WTO Agreements relevant to Pacific Island countries

WTO Agreement	Focus	Key provisions
1. The Agreement on Agriculture	To further fair and market-oriented agricultural trading through progressive reductions in market distorting agricultural supports and protection	a. Commitment to reduce tariffs. Taxes/subsidies b. Recognition of the special needs of developing and least developed countries
2. The Agreement on Sanitary and Phytosanitary Measures (SPS)	Food safety and the protection of humans from plant or animal-carried diseases and not broader nutrition concerns such as chronic disease prevention	a. Sovereign right of WTO members to decide the level of health protection they want b. Sanitary measures relate to food safety for humans and animals and phytosanitary measures relate to protecting plant health
3. The Agreement on Technical Barriers to Trade (TBT)	Fair and justified use of national regulations governing all food products entering a country	a. Excludes measures as defined in the SPS Agreement b. Technical barriers include regulations, food safety standards including labelling, and conformity assessment procedures

Table 3. Types of regulatory approaches available to Pacific Island countries

Regulatory approach	Purpose	Types of regulations
1. Restrictions on the supply of certain foods	Prevent the availability of foods that contribute to ill-health in the market place	Bans/quotas on imports Prohibitions on domestic sale of foods Composition standards prescribing nutritional criteria of foods
2. Pricing controls on foods	Reduce the accessibility and availability of food products in the marketplace that contribute to ill-health	Tariffs/duties on imported foods Domestic taxes (eg. wholesale and/or retail tax) Subsidise the production and/or processing of local food products that would support national food security and/or public health
3. Food labelling requirements	Inform consumers of the risks to health that foods may bring	Display of ingredients contained in the food Nutrition panel containing lists of of macro and micro nutrients Warning statements about the risk to health of foods or their ingredients

The key requirements are:

1. Technical regulation is contributing to the fulfilment of a legitimate objective.
2. Regulation is not more trade restrictive than necessary to fulfil the objective, taking account of the risks non-fulfilment would create.
3. Legitimate objective cannot be addressed in a less trade-restrictive manner.

The legitimate objective addressed by regulatory approaches could be to restrict the supply of certain foods to protect food security and nutritional quality. The regulatory approaches may be trade restrictive and it should be demonstrated that they are necessary to achieve the legitimate objective. A risk assessment process would be required to show that the risks of non-implementation, including the health, social and economic costs associated with food insecurity and poor nutritional health, outweigh any trade restrictive effect. The assessment must be supported with scientific evidence and demonstrated that the protection of food security and nutrition could not be addressed in a less trade-restrictive manner.

Education may be a less trade restrictive approach for addressing the problem, but it may be argued that generally education is a more long-term and often weaker approach for achieving food and nutrition policy objectives. For example, at the 2003 Tonga Prevention of Non-communicable Diseases Meeting, delegates stressed that nutrition education campaigns aimed at promoting healthy eating have achieved moderate success only in raising awareness of the problem.³⁹ When constructing the case for these regulatory approaches it would be important to emphasise that, given the significant level of food insecurity and poor nutritional health in PICs, such as diabetes, a strong response is required to tackle the serious and urgent nature of the problem. Also the case might stress that a broad and coherent policy framework involving both regulatory approaches and nutrition education is required to fulfil the legitimate objective.

Pricing controls on certain foods

Tariffs and domestic subsidies are trade-related agricultural instruments that fall under the Agreement on Agriculture. The use of tariffs and domestic subsidies by WTO Members will depend on commitments made when signing on to the WTO Agreements. Those PICs that are WTO observers would need to determine if they want to introduce tariffs and domestic subsidies. If so, they should establish the contexts for food security and nutritional quality considerations to justify the introduction of the pricing controls. Developing countries are allowed to use investment and input subsidies under certain conditions. These domestic support schemes can help support the production, processing and sale of local foods. Domestic taxes are not generally affected by the Agreement on Agriculture and are unlikely to fall under the rules and provisions of the WTO Agreements. Those PIC's who are WTO Members and that do introduce tariffs and domestic subsidies may be in contravention of the rules of the Agreement on Agriculture. However, least developed countries are not required to make commitments to tariff and domestic subsidy reduction. Also, it is noted in the Agreement on Agriculture that special and differential

treatment for developing countries is an integral element of negotiations. National health plans are legitimate concerns of developing countries and should be considered in negotiations when setting commitments on tariffs and domestic subsidies. Tariffs need to be shown to be essential components of the policy for protecting food security and nutritional status.

Labelling requirements

Nutrition claims, warning statements and nutrition information panels are technical regulations that fall under the TBT Agreement. The use of labelling requirements is relatively straightforward in relation to nutrition claims and a nutrition information panel as there are widely accepted guidelines and standards available that developing countries can incorporate into their food regulatory systems. The case to support the use of warning statements on fatty foods is similar to that constructed for regulatory approaches restricting the supply of certain foods, although there are no precedents for using nutritional warnings on labels. A provision to allow the use of warning statements on food labels has been included in the Fiji Food Safety Act 2003.⁴⁰ The case for using warning statements is strengthened by demonstrating they are an integral part of a broader policy framework, such as national obesity prevention programs.

The potential of food regulation as a policy instrument to help protect food security and nutrition is positive because of the special and differential treatment provisions contained in the WTO Agreements that are afforded to developing and least developed countries such as those in the Pacific. However, PICs must have the capacity to take advantage and realise the opportunities available. In practice many PICs have limited capacity to collect, analyse and interpret scientific evidence to construct the case for a regulatory approach. Should the case for a regulatory approach be constructed, the PIC then faces the challenges associated with meeting the technical and financial demands to administer, analyse compliance, enforce and monitor and evaluate the regulatory approaches. Additionally, many PICs lack the capacity to fully participate in the Codex standard-setting process and other international fora relevant to food and health. Many health officials have commented that often they are not involved in negotiations associated with WTO Agreements and if they are involved often they have not been fully informed of their rights and responsibilities. For example, agricultural officers in Samoa mistakenly believed that when the country became a WTO Member they would be obliged to uproot fruit trees that had been recently planted with assistance from an AUSAID program to support local agriculture and food security.⁴¹ This action was not necessary given Samoa's status within WTO as a least developed-country.

Conclusions

There is little doubt that the health and wellbeing of PIC populations has been affected by globalisation. This has resulted in diminished control of their food supplies and food security. Additionally, dependence on food imports is quickly dispossessing each island state of their cultural diversity and governance in terms of food production,

labour, skills and self-determination. However, in certain circumstances there are opportunities for PICs to use food regulation as a policy instrument to help protect food security, health and local food industries within existing WTO Agreements. The principle challenge for PICs is the need for increased capacity to take advantage of the opportunities that are available and to be able to fully participate in the international policy-making process.

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Globalisation, food and health in Pacific Island countries 太平洋岛国家全球化、食品和健康

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太平洋岛国家肥胖和由其引起的慢性疾病流行。尽管国家已制定了营养作用的发展计划并开始干涉促进健康饮食和体育运动，营养的地位还是只有一点点提高。本文是将两篇在 2003 年在斐济纳地召开的食品质量与安全大会上的研究文章综合而成的，该发现指出，尽管生活方式可能是饮食不平衡的直接原因，但是也应该更多的关注全球化作为太平洋地区营养转变的一个关键因素所同样存在的影响。特别地，全球化的这些媒介是通过 WHO 协议加压于食品安全及潜在的对进口低营养质量食品的依赖性增加，在太平洋岛国家快速地、有意义的和能接受的在公共健康方面的改进需要能够解决潜在的不健康因素的干涉。有许多机会可用来探索食物调整方法的使用以影响食品产品的组成、有效性以及可行性。在 WTO 协议里，食品调整方法的合法性取决于证明食品安全和公共健康营养的干扰和保护关系的情况。挑战在于意识到这些机会：1) 具备构建一个案例的能力，2) 满足管理和执行调整方法的技术和资金，3) 利用可利用的机遇尽量去参与国际政策的制定。

关键词：营养 全球化 食品规章 食品安全 太平洋