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A Health Impact Assessment (HIA) on the draft regulation 'Advertising and Promotion of Unhealthy Foods and Non-Alcoholic Beverages to Children Regulation' in Fiji

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The principle audience for the report is the Food Taskforce Technical Advisory Group, the members of which also formed the reference group for the project who oversaw the work as well as attended the workshops to provide input into the content.

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Executive summary

This report details the process and recommendations from a health impact assessment (HIA) on the draft regulation on marketing of food and non-alcoholic beverages in Fiji. Fiji is the only Pacific Island Country (PIC) to date to have pursued legislation to regulate this advertising, and has developed a draft regulation under its Food Safety Act. The draft regulation is currently (as of March 2016) with the Solicitor General's office for review, prior to discussion at cabinet. The HIA was conducted with the aim of influencing the content of the draft regulations and also the actions that the Food Taskforce Technical Advisory Group (FT-TAG) can undertake to foster support for those regulations to be adopted.

The HIA was conducted in collaboration with FT-TAG and with input from that group during two workshops in Suva, Fiji, in late 2015. A desk based HIA was proposed as suitable that focussed on existing data sources rather than collecting new primary data. It was expected that this desk based HIA would provide valuable information and an introduction to the approach for stakeholders in Fiji who may have not had previous opportunity to be actively involved in a policy oriented HIA. Therefore it was agreed to take a learning-by-doing approach where the consultants would work closely with country counterparts during the process and reporting.

The report follows the established structure of an HIA: Screening – to identify if the HIA was appropriate and useful, Scoping – to set out the parameters of the work, Identification – gathering information, Assessment – assessing that information, Recommendations – drafting recommendations, and Evaluation – establishing an evaluation process. Additionally the FT-TAG undertook a stakeholder analysis to inform the assessment and recommendations.

Overall finding from the HIA

Overall the HIA showed that the draft regulations if adopted and enforced as worded would have a positive impact on the reduction of childhood disease and the improvement of population health in Fiji. An overall finding was that, in line with the international experience with tobacco legislation, the regulations should be adopted and enforced as a whole rather than piece by piece.

Recommendations

The following recommendations were developed and agreed by FT-TAG. The recommendations fell into three types. One type concerned the detail in the regulations. The second was strategic actions from FT-TAG to progress the regulations. The third is to engage a wider audience in support of the regulations. The majority of these were generic across the regulations with additional recommendations for the specific issues.

Generic across the regulations

Detail in the regulations requiring further attention

- Include a clause that these regulations will supercede previous regulations or agreements
- Add definition of what a "setting" entails. For example, does this include moving transport such as busses?
- Gazette FT-TAG as an official advisory body to MOHMS

Strategic actions to progress the regulation

FT-TAG to:

- Encourage the focus to be on the regulations in totality rather than issue by issue
- Develop an evidence based argument for the impact of the regulation on improving population health (work with other partners eg academia)
- Identify core indicators for monitoring and assess whether these are included in the INFORMAS data collection (C-POND is using these under Pacific MANA)
- Map out stakeholders interests and what resources are required to take what action, including following up strategically with important 'fence-sitter agencies to develop support
- Map out group member responsibilities and identify which group members will take on engagement strategies with specific stakeholders outlined in the stakeholder analysis
- Work internally through government contacts(e.g. through ministry of health internally, across ministry of health to ministry of sport and ministry of education)
- Inform industries on proposed regulation through FBHAG
- Hold workshops for key media to assist with informing stakeholders after passage/ gazetting
- Prepare counter comments to deal with opposing viewpoints that industry and opponents to the regulations are prepared to apply
- Focus on using Alliance for Healthy Living to advocate for support for regulation from key target audiences
- Recommend that Consumer council lead lobbying campaign with support from FT-TAG
- Investigate who could provide alternative sponsorship at national and local levels
- Generate support for developing an evaluation of the effectiveness of the regulations
- Cost out the advocacy and strategic work – both $$ and inkind (over a time period) Consider practicalities of how the regulation will be enforced'

The Fiji government to:

- Ensure that food industry and other stakeholders are fully apprised of implications of regulation, in advance of the enforcement date
- Work with media and other key stakeholder groups to ensure that the community is also apprised of the role of the regulations
- Document clearly the mechanisms for enforcement
- Monitor the impact of the regulations, the enforcement of the regulations and any breaches of the regulations

Specific recommendations for the six focus areas of the draft legislation

Mass media marketing

*Strategic actions_*

- FT-TAG to Increase population awareness that advertising designated products to children is problematic
- Consumer council to work with Media – and consider using regular feature in Fiji times Saturday
- Consumer council to garner wider community support. To consider rights-based approach and the government responsibility to support sports
- FT-TAG to emphasise developing getting support from more influential figures

Sponsorship or promotion at children's activities and events

Strategic actions

- Consumer council to lobby for ending companies exclusive deals
- FT-TAG to counter the Industry position that their work on promoting physical activity is part of their social responsibility or altruistic
- FT-TAG to develop argument that food and beverage industry can provide money but not advertise their designated product
- FT-TAG to advocate that the 5% health levy be used for sports support

School based promotion

Strategic actions

- FT-TAG to include faith based organisations in stakeholder analysis as potential supporters

Rewards and prizes

Detail in the regulations

- Check accuracy of the regulations re. free

Food labelling

Detail in the regulations

- Revert to previous version (October 2015) which is about branding

Strategic actions

- Utilise FBHAG to ensure full understanding in food industry of the requirements
- C-POND to assess if INFORMAS data can be used to monitor this issue

Signage

- FT-TAG to Increase population awareness that signage of designated products is problematic

Background to the Health Impact Assessment of Food and Beverage in Fiji

Fiji is the only Pacific Island Country (PIC) to date to have pursued legislation to regulate this advertising, and has developed a draft regulation under its Food Safety Act. The draft regulation is currently (as of March 2016) with the Solicitor General's office for review, prior to discussion at cabinet.

The aim of this collaborative project was to conduct a health impact assessment (HIA) on the draft regulation on marketing of food and non-alcoholic beverages in Fiji. HIA is a structured process to predict the potential and often unanticipated health impacts of a policy proposal. It was felt that an HIA would facilitate more detailed understanding about the population health impact of regulations. A desk based HIA[1] was proposed. It was expected that this desk based HIA would provide valuable information and an introduction to the approach for stakeholders in Fiji who may have not had previous opportunity to be actively involved in a policy oriented HIA. Therefore it was agreed to take a learning-by-doing approach. This would engage stakeholders throughout via membership of reference group for the HIA. This reference group was also part of two workshops held in Fiji to scope the work and then scrutinize the relevant information to develop recommendations and actions concerning the detail of regulations and how to facilitate their progress

Bringing these issues together the work proceeded to meet the following objectives (shown in Box one).

Box one: Objectives of the health impact assessment

- Undertake a desk based HIA to assess and predict the potential health impacts of the draft regulations on marketing of food and non-alcoholic beverages in Fiji
- Follow a learning by doing model where the steps of an HIA are undertaken in collaboration with Fijian counterparts and overseen by an intersectoral reference group
- Engage a broad range of stakeholders, via email, meetings and workshops, in the scoping of the HIA and the information being developed during the HIA to inform recommendations for action about the regulations in Fiji
- Build the capacity of country counterparts to undertake the principle stages of an HIA to inform future health focused policy analysis activities
- Support country counterparts to develop and finalise a report on the HIA, its findings and recommendations

Health Impact Assessment and how was it applied to assess the regulations

Health impact assessment is a structured process whereby a policy proposal can be scrutinised for its likely effects on population health before that proposal is implemented. This report captures the process and its main outputs.

1 HIAs range from being desk-based (collecting no new primary data) to comprehensive (in depth analysis of primary data) assessments.

HIAs are practiced widely throughout the world [1, 2] and follow a standardised series of steps [3]. At their essence, HIAs develop an evidence base about the potential consequences of the issues being proposed in a policy to then improve the design of that policy such that it enhances health and health equity and mitigates any risks to health or health equity. However, HIAs have yet to be applied to the development of legislation.

This HIA followed most of the standard steps of an HIA, combining work by a core working group with two in-country workshops. These workshops presented core aspects of the HIA process while allowing stakeholders to actively input into the content of each stage. During the first workshop in Suva in October 2015 it became clear that an additional stakeholder analysis was required to unpack the range of supporting and opposing stakeholders to the regulation, and potentially identifying strategies based on this analysis. This is a novel step for an HIA and while the initial framework was developed during that workshop the reference group then further developed the stakeholder analysis in an additional meeting. This was then refined and used to inform the recommendations in the 2nd workshop in Suva Fiji in December 2015. The process is outlined in Table 1.

Table 1: Structure of the HIA on the draft regulations on marketing of food and alcoholic beverages in Fiji			
Step	**Purpose**	**Venue**	**Outputs**
Screening	Ascertain whether an HIA is useful for the particular proposal under scrutiny	Working group (Fiji and consultants) confirmed in first October 2015 workshop in Suva, Fiji	Confirmed the HIA was useful, that the proposed desk based approach was suitable, and provided the initial purpose of the work to be about informing the specific detail of the draft regulations as well as strategic priorities of the FT-TAG to progress the legislation.
Scoping	Set out the parameters of the work by scoping the issues to assess and developing the terms of reference including governance for the work	1st workshop in Suva Fiji	See terms of reference (appendix 1)
Stakeholder analysis	Systematically identify potential stakeholders, their support or opposition to the regulations, and power and influence concerning these.	Framework developed during 1st workshop. Completed during second meeting. Finalised at 2nd workshop to inform recommendations	Outline of stakeholders supporting or in opposition to the regulations
Identification	Desk based exercise collecting information on each scoped issue from the literature and existing population data.	Consultants (C-POND) with support from working group	Literature review concerning existing information about regulating food and beverage marketing to children within their living environments. Profile of populations potentially affected by the legislation.
Assessment	Assess the information collected against an assessment matrix	Working group develop matrix, assessed during 2nd workshop in Suva, Fiji	Inform the specific detail in the regulations and strategic actions required to progress the regulations
Recommendations	Develop recommendations based on the assessment	2nd workshop in Suva, Fiji	Develop recommendations about the detail of the regulations and the strategic opportunities for influence.
Evaluation and monitoring	Evaluate the core process aspects of the HIA and establish monitoring framework	Workshops	Process evaluation. Identify relevant monitoring information being collected by the INFORMAS network
Reporting	Report the process and its outputs	Working group finalised by reference group	Report

Background to the food and beverage regulations (including the role of the FT-TAG members)

The 'Advertising and Promotion of Unhealthy Foods and Non-Alcoholic Beverages to Children Regulation' was developed in response to the evidence of high advertising and promotion of unhealthy food and beverages to children in Fiji. Developed under the Food Safety Act 2003, the regulation aims to control advertising of unhealthy food and beverages to children in Fiji in an attempt to halt the rising prevalence of overweight/ obesity and obesogenic diets. The draft regulation has been submitted to Solicitor General's office for review, prior to discussion with at the Cabinet.

Following a request from the Former Minister for Health (Dr Sharma), the Food Taskforce Technical Advisory Group (FT-TAG) oversaw the work on the regulation. The regulation was initially drafted by a consultant, peer reviewed by Australian experts, underwent two large rounds of consultations with food industry, and is now under review at the SGs office.

FT-TAG was established in 2010 with the purpose of providing guidance, advice and feedback to the Ministry of Health and Minister of Health regarding technical issues in the areas of nutrition, diets, and food security-related policy nationally. The technical advisory team is chaired by the Director of Wellness, Ministry of Health, with the Manager of the National Food and Nutrition Centre providing secretarial support. The membership consists of key Ministries (Ministry of Health, Ministry of Trade and Industry), partners (World Health Organisation, Consumer Council of Fiji, Consultant Nutritionist), Food Industry (Fiji Commerce and Employers Federation), and Academia.

The global context related to food and beverage marketing

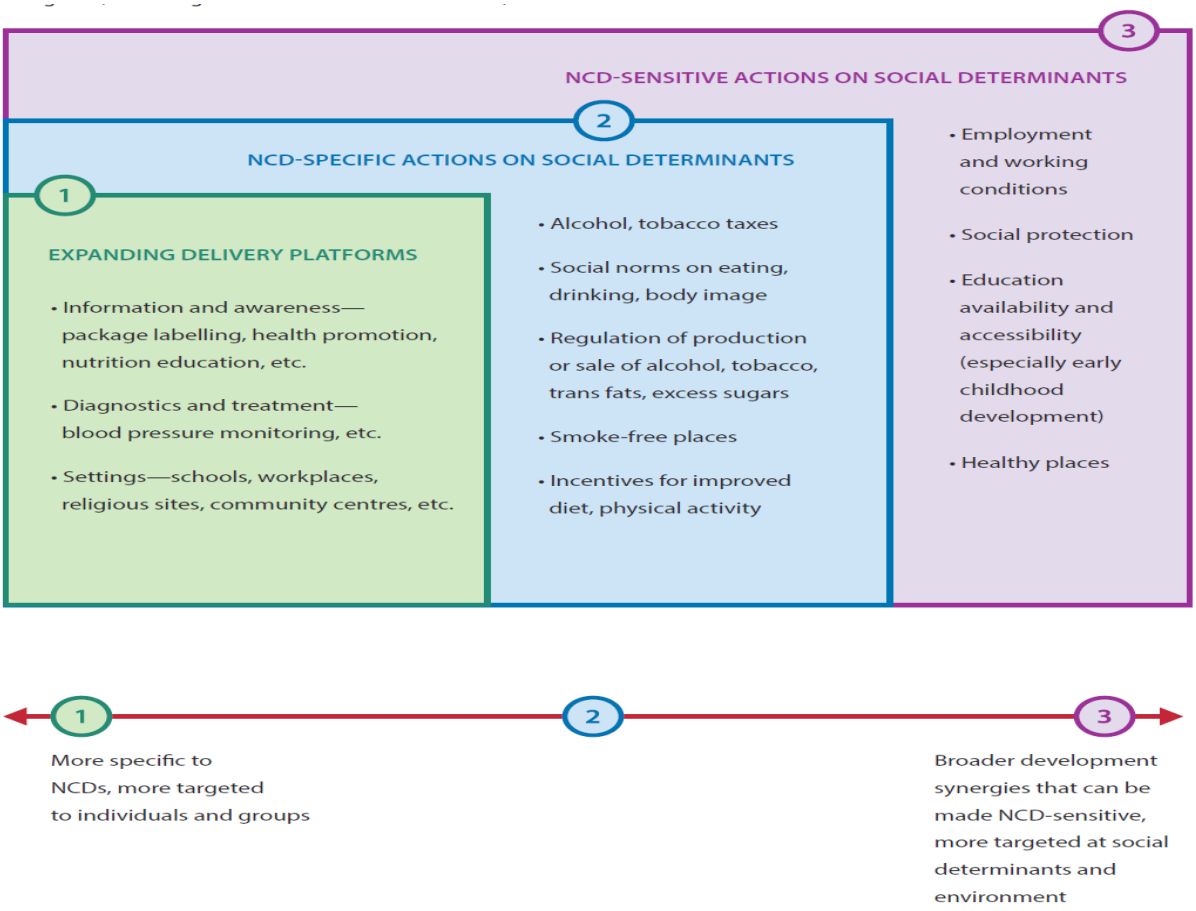
A complex mix of factors interact at the societal and individual levels to shape what, when, where and how much people eat. These influences interact across levels, over the life course, and between generations. The most direct influences operate through the food system, where agricultural production, manufacturing, retail, food services, and advertising shape what foods are available, where, and for what price. These in turn affect people's knowledge, preferences, purchasing, cooking and consumption behaviours [4-7]. There has been incredible progress made in the understanding of what can be done to improve the food supply and environment and reduce the risks of diet-related non-communicable diseases and obesity in children and adults worldwide. The World Cancer Research Fund's NOURISHING framework (Table 2) is based on a repository of over 240 good practice policies and actions from 90 countries worldwide [8], showing clearly the importance of government regulatory interventions. Restricting exposure to advertising of high fat, salt and sugar foods is widely considered to be one of the most cost-effective child obesity prevention approaches available and may contribute to reducing inequities due to the higher exposure and vulnerability of low income children to marketing [7, 9]. Population-wide controls on unhealthy food marketing through mass media and in public settings where people (and in particular children) spend a large amount of time (such as schools, shopping malls, and sports clubs) are likely to have positive impacts across the social hierarchy [10]. Regulation of broadcast television advertising has been implemented in a few jurisdictions internationally, demonstrating a stronger impact on reducing overall exposure in the UK and South Korea and a limited positive impact in Norway, Sweden and Quebec, Canada, and [11].

Table 2: NOURISHING framework

		POLICY AREA	EXAMPLES OF POTENTIAL POLICY ACTIONS
FOOD ENVIRONMENT	N	Nutrition label standards and regulations on the use of claims and implied claims on foods	e.g. Nutrient lists on food packages; clearly visible 'interpretive' and calorie labels; menu, shelf labels; rules on nutrient and health claims
	O	Offer healthy foods and set standards in public institutions and other specific settings	e.g. Fruit and vegetable programmes; standards in education, work, health facilities; award schemes; choice architecture
	U	Use economic tools to address food affordability and purchase incentives	e.g. Targeted subsidies; price promotions at point of sale; unit pricing; health-related food taxes
	R	Restrict food advertising and other forms of commercial promotion	e.g. Restrict advertising to children that promotes unhealthy diets in all forms of media; sales promotions; packaging; sponsorship
	I	Improve the quality of the food supply	e.g. Reformulation; elimination of transfats; reduce energy density of processed foods; portion size limits
	S	Set incentives and rules to create a healthy retail environment	e.g. Incentives for shops to locate in underserved areas; planning restrictions on food outlets; in-store promotions
FOOD SYSTEM	H	Harness supply chain and actions across sectors to ensure coherence with health	e.g. Supply-chain incentives for production; public procurement through 'short' chains; health-in-all policies; governance structures for multi-sectoral engagement
BEHAVIOUR CHANGE COMMUNICATION	I	Inform people about food and nutrition through public awareness	e.g. Education about food-based dietary guidelines, mass media, social marketing; community and public information campaigns
	N	Nutrition advice and counseling in health care settings	e.g. Nutrition advice for at-risk individuals; telephone advice and support; clinical guidelines for health professionals on effective interventions for nutrition
	G	Give nutrition education and skills	e.g. Nutrition, cooking/food production skills on education curricula; workplace health schemes; health literacy programmes

Peoples' diets are also a product of the broader daily living conditions in which they are born, live, learn, work and age. These daily living conditions are in turn shaped by the underlying norms, values, policies, institutions and processes that govern society, and which systematically distribute the determinants of unhealthy eating unequally [12]. The United Nations Development Program has also highlighted the importance of food regulations in its analysis of the determinants of NCDs (UNDP 2013 *Action on the Social Determinants of NCDs)* - see figure 1.

Figure 1: NCD action on the social determinants of health



The evidence of the problem of food and beverage marketing and its impact in Fiji

The evidence presented here about the crisis of NCDs in Fiji is taken from the information gathered during the HIA, but presented here to provide context to the regulations.

Fiji is experiencing an NCD crisis, with cardiovascular diseases, diabetes and stroke being the main cause of mortality among adult population. In 2010, the 'Global Burden of Diseases Study'[13] reported that premature deaths due to ischemic heart disease, diabetes mellitus, and cerebrovascular disease contributed were the main cause of years of life lost (YLLs) in Fiji.

Risk factors for NCD are also prevalent. Overall, high body mass index (BMI), dietary risks and high fasting plasma glucose were the leading risk factors for NCD in 2010 [14]. The recent NCD STEPS Survey found that 35.2% of adults were overweight (95%CI 32.4-37.9) and 31.8% obese (95%CI 28.7-34.8), with more women (41.7% 95%CI 38.0-45.3) than men (22.2% 95%CI 18.6-25.7). iTaukei were more likely to be obese than Fijians (of Indian descent). Dietary risk particularly the consumption of fruits and vegetables ≤ 5 serves a day was reported among 85% (95%CI 82.6-87.5%) of adults. Fijians (of Indian descent) generally

consumed more fruits and vegetables than iTaukei but difference in age and gender were minimal. Likewise, overweight/obesity and obesogenic diets are also great concerns among children and adolescents in Fiji. Approximately 19% of adolescents (aged 13-15 yrs) were found to be overweight and 5.3% were obese in the most recent survey[15]. Obesogenic dietary patterns; high consumption of sugar-sweetened beverages and high fat/salt snacks were common among adolescents and found to be associated with weight status [16].

The changing food environment has impacted negatively on dietary patterns of children in Fiji. Processed foods high in fat, sugar and salt are readily available and accessible and are now more valued by many than traditional foods [17, 18].While many factors contribute to the change in dietary patterns of children, marketing and promotion of unhealthy foods and beverages pervade children's lives with unprecedented intensity and frequency and influence their food preferences, purchasing and consumption [19]. In Fiji, it reaches children mostly through television, radio, street advertising (signage), and sponsorship of schools' sports events [18, 20].

Studies in children (11-18 years) in Fiji have found substantial level of advertising and viewing. Studies on TV advertising in 2010 and 2012 on two main free-to-air local TV channels indicated that 18.5% of advertisements were for food and beverages, of which almost 80% were for 'junk foods'[18]. A similar study also found that over 50% of primary and secondary school children reported watching TV every day of the school week [18]. The average time spent on watching TV was found in the 2010 study to be 1.9 hours (95% CI 1.5, 2.3) and 2.1 hours (95% CI 1.8, 2.4) per school day for primary and secondary students respectively, but increased to 7.1 hours (95% CI 6.5, 7.7) over the weekend. About 77% of children in primary school and 59% in secondary school reported that they 'watched and listened' to advertisements and over 90% indicated consumption of the foods advertised which are mostly unhealthy [18, 20]. Radio food advertising was also to be common in a follow-up study on three prominent radio stations, with the majority (range from 53%-68%) of the food adverts occurring during the weekdays [18]. Adverts for less healthier foods and beverages was as high as 60% of overall adverts in one of the radio stations. Over 50% of primary school children and 8 in 10 secondary school children reported listening to radio food adverts. Street advertising of unhealthy food and beverages has also been found to be particularly high around schools. A 2012study found that a total of 182 advertisements for unhealthy food and beverages were found in the three locations investigated [20], with posters and billboards being the most common form. Sponsorship of sport events by food industries is also a significant issue in Fiji. Hope et al.[20] reported on fourteen events being sponsored by 'junk food' products companies in 2012, targeting children, families and schools.

Access to unmonitored spending money has also previously been found to be an issue in Fiji, with the majority of adolescents in a study in peri-urban schools reporting receiving $2 to $5 for a school day [21]. The money was likely to be spent directly on less healthy food options or pooled in with other friends to do so.

Screening and scoping

Screening establishes whether an HIA is appropriate and useful. Scoping develops and sets out the parameters of the work over the life of the HIA.

A workshop was held in Suva on 1st of October, 2015 with key individuals from FT-TAG (including Ministry of Health, Consumer Council, C-POND, and World Health Organisation). The purpose of this workshop (Appendix two) was to introduce the HIA process as well as invite input into the screening and scoping for the work. The workshop attendees first

agreed that the HIA was a useful process and the desk-based / learning-by-doing approach adopted was suitable and worthwhile. Crucially, it was agreed that using the HIA steps was appropriate even though the legislation had already been drafted. It was felt that this process could provide a check on the detail of the legislation as well as navigate the evidence based concerning the regulations.

To scope the HIA the participants were guided through the HIA steps by the consultant and then worked through potential terms of reference. FT-TAG played a key role in preparing for this workshop and also provided the background information of the regulation. In addition, most of the participants of this HIA process are also FT-TAG members.

Core aspects of the scoping (see Appendix one - terms of reference) were as follows:

- The HIA will assess the following provisions in the regulations for their health impact:
    - Mass media advertising
    - Sponsorship or promotion at children's activities/events
    - School based promotion
    - Rewards and prizes
    - Food labelling
    - Signage
- The population of focus will be children and their environment. The exposure to impacts may be distributed geographically as urban, peri-urban and to a lesser extent rural, socio-economic status (concerning mass media)
- The HIA will be governed by an advisory and stakeholder group comprised of the Food Taskforce Technical Advisory Group.
- Identified the need for a stakeholder analysis

Stakeholder analysis

Stakeholder mapping is usually done in an HIA to identify which stakeholders to engage in the process as well as, in more comprehensive HIAs, being sources of information about impacts. During this HIA on the regulations, as mentioned, the need for a detailed stakeholder mapping became apparent as a mechanism for working through who supported and opposed the progress and adoption of the regulations. The parameters of the stakeholder map were established during the first workshop and were based roughly on the parameters provided in the health policy literature (for example see [22]). The analysis was further developed and refined during the second HIA workshop and is presented in Table 3 below. Crucially, this was developed by the reference group based on their local knowledge and was not informed by any primary data collection such as surveys or interviews.

Table 3: Stakeholder analysis for the progress of regulations on food and beverage marketing in Fiji (as of December 2015)

Issue	Stakeholder	Involvement	Interest H/M/L	Influence H/M/L	Resources H/M/L($$$ / other)	Position Promote Latent / On the fence Against	Impact H/M/L
No sponsorship	Food and beverage industry	Money and resources	High	High	High($$$, lobbying opportunities)	Against	H
	Ministry of Sport	Promoting sport, requiring sponsorship and exporting athletes	H	H	L ($$, human resources)	Latent (needs persuasion)	M
	Ministry of Health	Leaders	H	M	L	Promote	M
	Minister of Health	None currently	L	H	L (ideas)	Latent	H
	Permanent Secretary (PS) Health	No involvement	L	M	L	No position	M
	Deputy Secretary, Public Health (DSPH)	Involved	H	M	L	Promote	M
	Principals association	Signatories to sponsorship/ Little involvement in regulations	M	L	L	Latent (on the fence)	L- currently H
	Parents and teachers association	Participation in events	L	L	L	Against but want participation in events	M
	Consumer Council of Fiji	Instigator, Leader	H	H	L($$) H(position and public opinion)	Promote	H
	Sport organization: Rugby, soccer, netball	L	H	L-M	L	Could be persuaded	M
	Media	L	L	H	M	They don't know	H

Issue	Stakeholder	Involvement	Interest H/M/L	Influence H/M/L	Resources H/M/L($$$ /other)	Position Promote Latent / On the fence Against	Impact H/M/L
Mass media advertising	Food and beverage industry	H	H	H	H	Against	H
	Media	L	H	H	L($$$) TV- H Radio –H Print –L	Against	H
	Ministry of Health	Leaders	H	M	L	Promote	M
	Minister of Health	None currently	L	H	L (ideas)	Latent	H
	Permanent Secretary (PS) Health	No involvement	L	M	L	No position	M
	Deputy Secretary, Public Health (DSPH)	Involved	H	M	L	Promote	M
	Principals association	Signatories to sponsorship/ Little involvement in regulations	M	L	L	Latent (on the fence)	L- currently H
	Parents and teachers association	Participation in events	L	L	L	Against but want participation in events	M
	Consumer Council of Fiji	Instigator, Leader	H	H	L($$) H(position and public opinion)	Promote	H
	Graphic Companies	L	H	M	M	Against	H

Issue	Stakeholder	Involvement	Interest H/M/L	Influence H/M/L	Resources H/M/L($$$ /other)	Position Promote Latent / On the fence Against	Impact H/M/L
School based promotion	School management	None	L	M -H	L	Needs persuasion	M
	Canteen operators	None	H	L	L	against	M
	Teachers	None	L	M	L	Against/needs persuasion	M
	Food and beverage industry	H	H	H	H	Against	H
	Minister of Education	None	L	H	L	Needs persuasion	H
	Parents and teachers association	Participation in events	L	L	L	Against but want participation in events	M
	School children	Recipient	H	L	L	Against	L

Issue	**Stakeholder**	**Involvement**	**Interest H/M/L**	**Influence H/M/L**	**Resources H/M/L($$$ /other)**	**Position Promote Latent / On the fence Against**	**Impact H/M/L**
Rewards & Prizes	Food Industry	H	H	H	H	Against	H
	Mobile phone Companies	L	H	H	H	Against – currently Later – needs persuasion	H
	Consumers	L	H	H	L	Against	M
	Stores	L	H	L	L	Against	L
Food Labelling	Food and beverage industry	H	H	H	H	Against	H
	Ministry of Health	Leaders	H	M	L	Promote	M
	FT TAG	H	H	L	L	Promote	L
Signage	Food and beverage industry	H	H	H	H	Against	H
	Village	L	H	M	L	Against	M
	Graphic Companies	L	H	M	M	Against	H
	Schools	L	H	M	L	Against	M
	Fiji Sports Council	L	H	H	L	Against	M
	Municipal Councils	L	H	H	L	Needs persuasion	M
	Public transport (Taxis, buses)	L	H	H	L	Against	L

Identification

The identification step of an HIA concerns gathering information to inform the assessment. The principle source of this was a literature review of 52 sources, mainly systematic reviews and reports provided by the WHO Office, Suva, along with demographic data from the Fiji Bureau of Statistics. Notably the literature review focuses on the epidemiology of the problem rather than solutions or structural interventions to address the problem. The demographic data provided an indication of the profile of children and their environment. The result of the literature review is presented below followed by the demographic profile.

Literature review

The literature is presented against each of the scoped areas of the regulation. Overall, the review presents evidence that shows the need for that area within the regulation and, where available, evidence or conclusions about the impact of adopting the regulation both on population health but also on the industry itself. Notably most of the evidence is on the impact of various food and beverage marketing activities on population health.

Mass media advertising

The need:

The food and beverage industry spends extensive amounts on advertising their products to children, with approximately $870 million spent annually on marketing these products to children under the age of 12 in the United States alone[23]. Children are specifically targeted in marketing campaigns, as emotional attachments formed towards a brand are often strongest in children and can consequently result in maximised sales for brands over the duration of an individual's lifetime [24]. A systematic review by Hastings et al.[25] concluded that the current evidence supports that food marketing has an effect on the preferences, purchasing behaviour, and consumption of unhealthy food products by children.

National policies regarding the marketing of food and beverage products to children on television vary and are often not enforced, resulting in children remaining exposed to a large amount of unhealthy food and beverage marketing [24]. Although food and beverage manufacturers often technically abide to industry set, voluntary regulations, children are still targeted in a large amount of marketing of unhealthy food and beverages online [26]. This suggests that when policies are industry led, voluntary, and/or not adequately enforced, they are often ineffective.

Efficacy of controls on advertising:

Mandatory restrictions regarding the advertising of unhealthy food and beverage products to children through television were implemented in the UK in 2007 [27]. Two years after implementation there was a 37% decrease in this form of advertising with 52% of this reduction occurring in young children aged 4-8 years old[27]. When compared to other interventions targeting a reduction in obesity, reducing television advertising towards children of high fat and/or high sugar foods and beverages is likely to have the biggest population impact on health and economics [28].

An earlier interim review of the advertising policies, 1 year after implementation, revealed that although there was a decline in the revenue to broadcasters generated from food and beverage advertisements on children's channels, there remained an increase in the overall revenue received by the broadcasters [29]. However the broadcasters were unable to provide data regarding the specific effects of the policy implementation on revenue in subsequent years [27].

These preliminary findings suggest that total advertising revenues can potentially be unaffected if mandatory restrictions are introduced on food and beverage advertising towards children. This may be due to broadcasters finding alternative advertising to replace food and beverage advertisements.

The impact of statutory restriction through TV advertising has been found to be significant, with evidence showing a 37% less advertisements of fats, sugars or salt products over 4 years in Europe. Also, a 41% decrease in annual expenditure for child-themed food and drink advertisements across all media was reported [30].

Sponsorship or promotion of children's activities

The need:

Children are able to recall sponsorships linked to sporting events and often feel more positively towards companies which sponsor a sporting team or athlete [31].Sponsorships encourage brand loyalty within children, with an Australian study identifying that 41% of the time, children will more frequently purchase products which they have seen sponsor a sporting team or athlete [31].

Large amounts of unhealthy food and beverages are sold and advertised during sporting events attended by children [32]. Despite this, sponsorship from food and beverage industries sporting clubs often secure the bulk of their funds from other sources [32].An Australian study of children's community level sports clubs has shown that 67% of clubs reported that less than 15% of the club's overall income was from sponsorships [33]. Only 3% of clubs reported that more than 75% of income came from sponsorships[33].

Large amounts of unhealthy food and beverages are sold and advertised during sporting events attended by children [32]. Despite this, sponsorship from food and beverage industries sporting clubs often secure the bulk of their funds from other sources[32].An Australian study of children's community level sports clubs has shown that 67% of clubs reported that less than 15% of the club's overall income was from sponsorships [33]. Only 3% of clubs reported that more than 75% of income came from sponsorships[33].

Further to this, the study also highlighted that relatively few food and beverage company sponsors actually provide direct funding to clubs, and did so at a lower rate than non-food company sponsors (41% of food sponsors vs. 83% of non-food sponsors) [33]. Examples of alternative support from food company sponsors include discounted or free food and/or branded equipment such as water bottles [34].

The largest difference in the benefit provided to sporting organisations between food and beverage sponsorship and non-food and beverage sponsorship of children's sports, was the sale and/or use of the companies' products within the sporting environment (28% of food and beverage vs. 5% of non-food and beverage sponsors). The leading benefit of being a sponsor cited by food and beverage sponsors was having their companies signage on players uniforms[33].

Lastly, a systematic review by Carter et al.[32] found that sporting clubs identify healthier food and beverage companies as potential sponsors which could be approached in place of unhealthy food and beverage sponsorships and are open to such approach.

The above two studies suggest that sponsorship by 'unhealthy' food and beverage companies are not essential for income of sporting clubs and that there may be potential benefits for sporting clubs in approaching non-food and beverage sponsors, particularly in regard to receiving direct funding. For companies looking to use sponsorship as a form of advertising, non-food and beverage companies are also likely to benefit from sponsoring sporting clubs.

Impact of switching to healthier alternatives on revenue and behaviours:

Numerous case studies from schools within the United States have shown that swapping 'unhealthy' food and beverage products for healthier alternatives does not have a negative impact on revenue. Examples include: Oceanside (California) schools switching vending machine company to Child Nutrition Services vending machine, providing healthier and fresh alternatives which resulted in significantly higher income than under previous contracts and improvements in student food choices [35]. A middle school in California found that substituting healthier alternatives had no impact on a la carte sales and increased net revenues[36] ; Schools in Texas incorporating a nutrition policy which saw healthier food alternatives and the replacement of soft drinks with water in school, resulted in no significant change in food service revenue over a 1 year period [37]; and the replacement of a morning candy cart used for fundraising in a North Dakota junior high school with a breakfast cart containing healthier food choices resulting in unchanged revenue [38].

Further to this, in a survey of 313 primary schools within the United States, 87.5% of school officials reported that no programs would be reduced if marketing activities were prohibited within their school, with 53.7% in favour of increasing regulation restricting marketing of unhealthy foods within schools [39].

These studies suggest that substituting the sale of unhealthy food and beverage products for healthier alternatives at children's activities can leave revenue unaffected, and in some cases can be positively affected. This suggests that there is demand for healthy alternatives and that settings in which there is a large child base should not rely on unhealthy food and beverage options as healthier options are likely to generate similar income. These above studies also support a school-based approach for healthy food and beverage policies.

School-based promotion

The need:

The food and beverage industry spent approximately $186 million in schools within the United States, making up 11% of the total youth marketing by these companies [23].

A study of 44 primary and secondary schools within Poland found there to be a significant association between the advertising of a food product within a school setting and the purchase of that particular food product ($P<0.001$).

Canadian school students between grades 7 to 10 who report snack food or beverage logos within their schools have been shown to be significantly more likely to consume such products from school vending machines than students who report no snack food or beverage logos [40]. This study also identified that students who reported their school to have beverage vending machines were more likely to be overweight or obese when compared to students who reported no beverage vending machines within their school (OR 1.27, $P=0.015$)[40].

The food and beverage industry target areas which are within close proximity (<170m) to pre-schools and primary schools [41].

A report on potential policies addressing the marketing of food and beverage toward children emphasizes healthy zoning as an important policy area [10]. Literature included within this report identified that there is often a high density of unhealthy food environments surrounding schools and that such environments are associated with higher rates of overweight and obesity, particularly in children from lower socio-economic status [10]. Supporting the need for healthy zoning, a further study has also shown the distance of fast food stores from middle and high schools to be negatively associated with the BMI of adolescents ($P=<0.05$) [42].

No studies were found on the effectiveness of controls on marketing around schools for food and beverages.

School food policies and effectiveness:

A comprehensive health impact assessment by the Robert Wood Johnson Foundation & PEW Health Group [43] found numerous studies in which schools were able to maintain financial stability after the implementation and enforcement of healthy nutrition policies. Some studies within the literature review component of the assessment found that the decrease of unhealthy and increase of healthy options within schools resulted in little or no change to the schools revenues while several studies found there to be an increase in food service revenue and an increase in school meal participation [43]. The policy analysis component of the assessment found a small to moderate increase in total food service revenue was associated with the implementation of nutrition policies with schools moving from no policy to a policy which met or exceeded to 2005 Dietary Guidelines resulting in a statistically significant increase in revenue (average increase of 4%) [43]. These findings were however often due to increased participation in subsidised meal programs opposed to a la carte sales [43].

One Canadian study has shown there to be a statistically significant decrease in the consumption of nutrient poor foods after the implementation of a school nutrition policy [44].

Rewards and prices

The need:

The food and beverage industry spend $67 million per annum in the United States on premiums and prizes for children and adolescents, not inclusive of toys at fast food eateries [23].

A systematic review of the effects of food promotion to children has shown free gifts with food and beverage purchases attract the attention of, and increases demand for, these products by children[25].

No evidence was found on the impacts of controlling rewards and prizes.

Food Labelling

The need:

A content analysis of foods with packaging appealing to children in Canadian food stores revealed that 89% of products marketed to children were of poor nutritional quality[45]. Products often used child-oriented fonts, cartoons, and games, and made both direct and indirect references to fun [45]. Similarly, a study on cross-promotions on product packaging marketed to children in the United States also showed product packaging marketed toward children contained significantly higher amounts of sugar to those targeted to other ages and popular features on packaging includes licenses characters and toys and games [46].

Food and beverage packaging attracts attention and increases demand of products from children [25]. A systematic review of studies from the US, Netherlands, Belgium, Guatemala, and Turkey has shown that the use of media and cartoon characters in marketing increase children's preferences for, purchase request, and intake of food and beverages and that this influence is strongest for unhealthy foods [47]. Further to this, it is suggested that characters used on food packaging are likely to be more influential on children's choice of foods when compared to their use on television commercials [47]. This issue has also been identified for fast foods, with a study of children aged 3 to 5 years showing preference for foods which are

packaged in MacDonald's branded, opposed to plainer packaging (P<0.001)[48] regardless of what the food was.

No evidence was found on the impacts of controls on packaging on behaviour.

Signage

The need:

The advertising of unhealthy food and beverage products was found to be significantly higher within areas surrounding primary schools with an Australian study showing higher density of this advertising to be within a 250m radius of schools and higher amounts seen within low socio-economic areas [49] . It has also been found that the more outdoor advertising for food and beverage products, the greater the odds of obesity among residents within that area [50]. A study within the United States found for every 10% increase in food advertising, there was a 1.05 greater odds of being overweight or obese (P<0.03) [50].

Implementing Policy:

A report on food marketing policies towards children provides a case study from California in which it was determined easier in regards to legalities to ban all advertising signage within certain areas opposed to solely banning the advertising of unhealthy food and beverages [10].

No evidence was found of the impacts of controls of signage on behaviour.

Demographics

The environment children live in plays a significant role in determining the level of exposure to and impacts of mass media, particularly to unhealthy food and beverages. This includes; where they reside (urban; peri-urban; rural) and socio-economic status. Table 4 shows the demographic characteristics of population in Fiji in 2007. The total population was 837,271, with almost equal distribution of population residing in both rural and urban settings. Fiji is made up of two main ethic groups; iTaukei and Fijian (of Indian descent). There has been increasing access to television and other communication media in both rural and urban areas in Fiji which would in turn likely affect the exposure to advertising, and increase the reach of the proposed regulation.

Table 4: Demographic Characteristics of population in Fiji

Geographic area	Ethnicity	Population size (2007)
Total	All	837,271
	Fijians (iTaukei)	475,739
	Fijians (of Indian descent)	313,798
	Others	47,734
Rural	All	412,425
	Fijians (iTaukei)	264,235
	Fijians (of Indian descent)	135,918
	Others	12,272
Urban	All	424,846
	Fijians (iTaukei)	211,504
	Fijians (of Indian descent)	177,880
	Others	35,462

Source: 2007 Census of Population and Housing, Fiji Bureau of Statistics 2008

Table 5 presents the socioeconomic status in terms of income between 2008 and 2009. The figures are relatively small, with total average income of $17,394 per household. Urban areas have higher household income compared with rural areas. This has implications for purchasing and consumption of unhealthy food and beverages by children or their guardian(s).

Table 5: Socioeconomic Status (income)

Area	2008-2009
Average Household Income[$]	
Rural	11,608
Urban	23,036
Total	17,394
Household Income per Adult Equivalent [$]	
Rural	2,895
Urban	5,879

Source: Fiji Bureau of Statistics - Key Statistics: June 2012

In Table 6, the distribution of population by age is shown. Approximately 28% of the population were children between 5 and 19 years.

Table 6: Population by age (highlighting children and adolescents)

Age	Total	Ba	Bua1	Cakau drove	Kadavu	Lau	Lomaiviti	Macuata	Nadroga Navosa	Naitasiri	Namosi	Ra	Rewa	Serua	Tailevu	Rotuma
Total	837,271	231,760	14,176	49,344	10,167	10,683	16,461	72,441	58,387	160,760	6,898	29,464	100,787	18,249	55,692	2,002
Less than 5 years	82,718	21,093	1,732	5,834	1,300	1,245	1,924	6,616	5,691	16,053	847	3,115	9,380	1,939	5,760	189
5 - 9 years	78,019	19,553	1,670	6,002	1,156	1,273	2,017	6,572	5,446	14,288	826	3,102	8,431	1,763	5,710	210
10 - 14 years	82,384	21,764	1,528	5,679	1,114	1,267	2,035	7,590	5,586	15,037	814	3,126	8,785	1,869	5,928	262
15 - 19 years	79,518	22,040	996	3,977	831	736	1,497	7,815	4,980	16,202	539	2,673	9,609	1,745	5,687	191
20 - 24 years	80,352	22,662	1,026	3,632	728	734	1,137	5,579	5,494	18,067	559	2,397	11,724	1,771	4,744	98
25 - 29 years	73,487	21,708	1,064	3,712	831	727	1,111	5,477	5,153	15,587	571	2,220	9,534	1,497	4,213	82
30 - 34 years	63,535	18,076	1,022	3,533	647	593	1,058	5,275	4,645	12,180	575	2,145	8,007	1,426	4,253	100
35 - 39years	56,552	16,076	952	3,240	594	690	1,069	5,246	3,916	10,788	461	1,954	6,727	1,133	3,583	123
40 - 44 years	56,274	16,254	907	3,221	624	730	1,042	5,430	4,135	10,191	402	1,922	6,472	1,154	3,641	149
45 - 49 years	50,322	14,826	840	2,704	553	652	915	4,721	3,616	9,052	354	1,735	5,975	1,069	3,193	117
50 - 54 years	40,009	11,843	657	2,122	444	469	701	3,655	2,724	7,488	262	1,357	4,818	840	2,515	114
55 - 59 years	31,161	9,077	515	1,735	369	368	607	2,775	2,298	5,596	238	1,073	3,763	634	2,027	86
60 - 64 years	24,120	6,672	441	1,372	317	330	474	2,163	1,801	4,266	181	942	2,865	551	1,662	83
65 - 69 years	16,808	4,541	353	1,108	242	317	377	1,550	1,269	2,647	131	749	1,932	383	1,142	67
70 - 74 years	10,110	2,566	229	695	190	261	243	957	744	1,526	67	439	1,202	222	709	60
75 years & over	11,902	3,009	244	778	227	291	254	1,020	889	1,792	71	515	1,563	253	925	71

Source: 2007Census of Population and Housing, Fiji Bureau of Statistics 2008

Assessment

Assessment works through the information to inform recommendations. Prior to the second workshop the working group established various parameters to the assessment step in an assessment matrix. This matrix was then used to guide the workshop and focus attention toward developing recommendations (see table 7 below). The matrix initially included dimensions concerning stakeholders but during the workshop it became apparent that this information had previously been detailed in the stakeholder analysis. The core parameters were developed for the following reasons

- *Details of the Regulation* (e.g., restrict advertising to younger children): provided the wording of the regulation
- *What the regulation is trying to do?* (Objective / rationale): outlined the intent and rationale behind the specific wording / objective
- *Evidence*: what does the evidence suggest about the regulation and its impact on population health
- *Population profile*: what does the profile data suggest about the regulation and its impact on population health
- *Missing data:* What additional data is required to inform the regulation and its impact on population health
- *Unanticipated impacts:* what impacts had not previously been considered
- *Stakeholders*: stakeholders to engage with either because they have high power for influence and are interested in supporting the regulations or require additional work to encourage support

Table 7: Assessment matrix across the regulations

Issue in regulation	Details of the Regulation (e.g., restrict advertising to younger children)	What the regulation is trying to do? (Objective)	Evidence	Demographic considerations/ population profile	Missing data/ evidence	Unanticipated issues/impacts	Stakeholders to engage with
MASS MEDIA	Type of advertising to children: style, location, medium / Style of advertising: images likely to appeal to children	Prohibit advertising of designated products appealing to children / Reduce exposure and desirability / Reduce brand loyalty	Controlling TV advertising is positive for health of children	Socio-economic difference potential but products low cost and children have high purchasing power across SES	Internet (not regulation of enforcement). Kelly B et al. [31] reported excessive website marketing of non-core foods through branding, competitions, promotional characters etc., with no regulatory measures.	Impact on local investment in advertisements from non-food and beverage industry	Media, Ministry of health, minister of health, Consumer Council of Fiji, communication and marketing and graphics companies
SPONSORSHIP OR PROMOTION AT CHILDRENS EVENTS	Prohibit use of unhealthy products at settings and events where there are more than 30% children	Reduction in exposure, Reduce brand loyalty, Stop normalising	Local evidence of exposure problem, Children responsive to sponsorship activity, Cost effectiveness	National gatherings are in urban areas	Evidence of stopping sponsorship, Take some learnings from tobacco control	Events will stop - Risk of public outcry, Loss of revenue to Sports council and municipal council	Ministry of sport, Ministry of Health, Principals Association, Sports organisations (rugby, soccer, netball) head teachers association, Consumer Council of Fiji, Municipal Councils, Sports Council, media, communication and marketing and graphics companies
FOOD LABELLING	Restrict labelling (note is branding not labelling) and imagery on packaging intended to appeal to children	Reducing exposure, Countering branding identification for unhealthy products	Lessons from tobacco control on evidence around sponsorship and packaging.	Whole population affected	Exposure data in Fiji, data on effectiveness	If importers don't comply with regulation or pull product, the variety and choice decreases but it may advantage local industry	Ministry of Health, FT-TAG, Consumer Council of Fiji

Issue in regulation	Details of the Regulation (e.g., restrict advertising to younger children)	What the regulation is trying to do? (Objective)	Evidence	Demographic considerations/ population profile	Missing data/ evidence	Unanticipated issues/ impacts	Stakeholders to engage with
SIGNAGE	Restrictions on signage within 200 metres of school, childcare and other settings where children likely to gather	Reduce exposure	Local and international evidence of exposure increasing outdoor advertising, surrounding schools, children responsive to outdoor advertising	Urban impact more likely because more schools	Draw lessons from tobacco control for restriction of signage near schools	If company has 'naming rights' to the stadium, they may not allow children to enter, Removing sponsored signs from schools means they may have to pay themselves, dynamic signage e.g. school buses may not be captured	Villages, municipal councils, schools, Fiji sports council, public transport agencies and organisations
REWARDS AND PRIZES	Stop branded promotions, Stop branded incentives	Brand loyalty, Exposure, Making people unwittingly buy products	From Chile re. brand loyalty	Higher risk and uptake at lower income levels [need data to support this claim], Prizes exacerbate inequalities	OPIC study for disposable income and allocation on food	Community at large unhappy, taking away prizes and tokens for schools negative consequences for schools	Ministry of sport, ministry of health, principles association, sports organisations (rugby, soccer, netball) head teachers association, consumer council of fiji, municipal councils, sports council, media, graphics companies, mobile phone companies
SCHOOL BASED PROMOTIONS	No products or promotional equipment in schools	Reduction in exposure, Reduce brand loyalty, Stop normalising	Effectiveness of school food policies	Variation in socio-economic status of schools	Exposure data, data from across the school system	Will schools be disadvantaged if not provided with products e.g. fridges, existence of ongoing contracts with food companies needs to be considered in regulations	Ministry of sport, ministry of health, principles association, sports organisations (rugby, soccer, netball) head teachers association, consumer council of Fiji, municipal councils, sports council, media, communication and market and graphics companies, Minister of Education, Faith based organisations

Recommendations

Recommendations were considered during the second workshop as part of the process of working through the assessment step and then through a specific focus on developing recommendations based on the workshop discussions. The recommendations fell into three types. One type concerned the detail in the regulations. The second was strategic actions from FT-TAG to progress the regulations. The third is to engage a wider audience in support of the regulations. The majority of these were generic across the regulations with additional recommendations for the specific issues.

Generic across the regulations

Detail in the regulations requiring further attention

- Include a clause that these regulations will supercede previous regulations or agreements
- Add definition of what a "setting" entails. For example, does this include moving transport such as busses?
- Gazette FT-TAG as an official advisory body to MOHMS

Strategic actions to progress the regulation

FT-TAG to:

- Encourage the focus to be on the regulations in totality rather than issue by issue
- Develop an evidence based argument for the impact of the regulation on improving population health (work with other partners eg academia)
- Identify core indicators for monitoring and assess whether these are included in the INFORMAS data collection (C-POND is using these under Pacific MANA)
- Map out stakeholders interests and what resources are required to take what action, including following up strategically with important 'fence-sitter agencies to develop support
- Map out group member responsibilities and identify which group members will take on engagement strategies with specific stakeholders outlined in the stakeholder analysis
- Work internally through government contacts(e.g. through ministry of health internally, across ministry of health to ministry of sport and ministry of education)
- Inform industries on proposed regulation through FBHAG
- Hold workshops for key media to assist with informing stakeholders after passage/ gazetting
- Prepare counter comments to deal with opposing viewpoints that industry and opponents to the regulations are prepared to apply
- Focus on using Alliance for Healthy Living to advocate for support for regulation from key target audiences
- Recommend that Consumer council lead lobbying campaign with support from FT-TAG
- Investigate who could provide alternative sponsorship at national and local levels
- Generate support for developing an evaluation of the effectiveness of the regulations

- Cost out the advocacy and strategic work – both $$ and inkind (over a time period) Consider practicalities of how the regulation will be enforced'

The Fiji government to:

- Ensure that food industry and other stakeholders are fully apprised of implications of regulation, in advance of the enforcement date
- Work with media and other key stakeholder groups to ensure that the community is also apprised of the role of the regulations
- Document clearly the mechanisms for enforcement
- Monitor the impact of the regulations, the enforcement of the regulations and any breaches of the regulations

Specific recommendations for the six focus areas of the draft legislation

Mass media marketing

Strategic actions

- FT-TAG to Increase population awareness that advertising designated products to children is problematic
- Consumer council to work with Media – and consider using regular feature in Fiji times Saturday
- Consumer council to garner wider community support. To consider rights-based approach and the government responsibility to support sports
- FT-TAG to emphasise developing getting support from more influential figures

Sponsorship or promotion at children's activities and events

Strategic actions

- Consumer council to lobby for ending companies exclusive deals
- FT-TAG to counter the Industry position that their work on promoting physical activity is part of their social responsibility or altruistic
- FT-TAG to develop argument that food and beverage industry can provide money but not advertise their designated product
- FT-TAG to advocate that the 5% health levy be used for sports support

School based promotion

Strategic actions

- FT-TAG to include faith based organisations in stakeholder analysis as potential supporters

Rewards and prizes

Detail in the regulations

- Check accuracy of the regulations re. free

Food labelling

Detail in the regulations

- Revert to previous version (October 2015) which is about branding

Strategic actions

- Utilise FBHAG to ensure full understanding in food industry of the requirements
- C-POND to assess if INFORMAS data can be used to monitor this issue

Signage

- FT-TAG to Increase population awareness that signage of designated products is problematic

Evaluation and monitoring

We conducted a process evaluation at the end of the each workshop. Generally participants felt the process had been useful in providing a structured approach to considering the regulations in detail, although most wanted more time to work through the steps of an HIA (1st workshop).There were concerns that the group was fairly small and was made up of those who already supported the regulations. To counter this it was felt that more work was required (see also recommendations) working from the HIA to engage with wider group of stakeholders and being clear about priorities. This work should include mapping out and planning next steps for the FT-TAG including actual and in-king costs.

Impact or outcome evaluation not possible given the timeframes the HIA was conducted in and the need for more time for this to be influential. Also the HIA was recognised as one of a suite of activities aiming to impact on the adoption of the regulation. Monitoring is possible through INFORMAS as mechanism both to continue monitoring the burden of disease but also changes that occur if the regulations are adopted. Additional monitoring can occur through Pacific Monitoring Alliance on Non-communicable Diseases Actions (MANA) which can provide additional parameters provided from the HIA (see missing data column in table 3).

Conclusion

This HIA has provided a systematic and transparent interrogation of the potential impact of implementing the draft food and beverage regulations in Fiji. The desk-based process and workshops have provided close scrutiny of the draft regulations, using the current evidence available, to provide recommendations to FT-TAG on the detail of those regulations, their implementation, and strategies to be employed to facilitate their adoption. The approach has been collaborative and the final report and recommendations developed country collaborators and with input from FT-TAG.

Restricting exposure to advertising of high fat, salt and sugar foods is widely considered to be one of the most cost-effective child obesity prevention approaches available and may contribute to reducing inequities due to the higher exposure and vulnerability of low income children to marketing. However, national policies regarding the marketing of food and beverage products to children on television vary and are often not enforced, resulting in children remaining exposed to a large amount of unhealthy food and beverage marketing.

Overall, the evidence of the negative impact of unhealthy food and beverage advertising on children is overwhelming. Much of this evidence points to food and beverage systems as one of the principle points that create this epidemic. This HIA supports the regulations as a suite of

activities that will, if adopted and implemented, reduce the ever increasing burden of chronic disease in Fiji. The evidence base is notable in its focus on describing the effect of the problem of food and beverage impacts on children. There is less evidence on system wide approaches to addressing the problem. This is partly due to the limited action globally adopting a whole suite of regulation. The global work regulating the tobacco industry has however provided resounding evidence of the positive impact of such activity. There are core lessons to be learned from the changes to tobacco regulation which have occurred in the past two decades and which have proven the necessity of a whole of system approach. As the HIA progressed by breaking down the core aspects of the proposed regulations into their constituent parts it became apparent that focussing in one aspect alone was insufficient. Rather, a holistic approach to regulative change that encompasses the whole system is required to be effective in reducing the epidemic of obesity and resulting chronic disease.

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Appendix One: Terms of reference

A health impact assessment on the draft regulations on marketing of food and non-alcoholic beverages in Fiji

Terms of Reference

October 2015

The Project

A health impact assessment on the draft regulations on marketing of food and non-alcoholic beverages in Fiji

Aims and Background: This collaborative project aims to conduct a health impact assessment on the draft regulations on marketing of food and non-alcoholic beverages in Fiji. The aim is to consider the evidence supporting the regulation and to develop recommendations to facilitate the adoption of the regulations and additional actions to be taken.

Globally actions to control advertising of foods and drinks to children have been limited. Fiji is the only PIC to date to have pursued legislation to regulate this advertising, and has developed a draft regulation under its Food Safety Act. This draft is currently with the Solicitor General's office for review, prior to discussion at cabinet.

Health impact assessment is a structured process to predict the potential and often unanticipated health impacts of a policy proposal. It is felt that an HIA will facilitate more detailed understanding about the consequences of the regulation.

HIAs range from being desk-based (collecting no new primary data) to comprehensive (in depth analysis of primary data). A desk based HIA is proposed, building on the current international literature and existing local information and stakeholder knowledge, and a stakeholder workshop to appraise the data and develop recommendations for the regulations. It is expected that this desk based HIA will provide valuable information of relevance and an introduction to the approach for the local group involved. Taking a learning by doing approach will enable stakeholders to be engaged through a advisory and stakeholder group for the HIA as well as through attending workshops in Fiji to scrutinize the information being generated to develop recommendations and actions. The HIA also provides an opportunity to build the capacity of country counterparts to take ownership of the findings and recommendations in a report and to potentially conduct HIA and policy level analysis to influence change in the future.

Bringing these issues together, this proposal focuses on the following objectives:

Objectives:

- Undertake a desk based health impact assessment to assess and predict the potential

health impacts, costs and benefits of the draft regulations on marketing of food and non-alcoholic beverages in Fiji

- Follow a learning by doing model where the steps of an HIA are undertaken in collaboration with Fijian counterparts conducting the analysis and forming the advisory and stakeholder group
- Engage a broad range of stakeholders, via email, meetings and workshops, in the scoping of the HIA and the information being developed during the HIA to inform recommendations for action about the regulations in Fiji
- Build the capacity of country counterparts to undertake the principle stages of an HIA to inform future health focused policy analysis activities
- Support country counterparts to develop and finalise a report on the HIA, its findings and recommendations

Project Scope

1. The HIA will assess the following provisions in the regulations for their health impact:
    - Mass media advertising
    - Sponsorship or promotion at children's activities/events
    - School based promotion
    - Rewards and prizes
    - Food labelling
    - Signage

    The population of focus will be children and their environment. The exposure to impacts may be distributed geographically as urban, peri-urban and to a lesser extent rural, socio-economic status (concerning mass media):
2. The project will be completed by end January 2016

Governance: The HIA will be governed by a advisory and stakeholder group comprised of the Food Taskforce Technical Advisory Group. A member of FT TAG – Pacific Research Centre for the Prevention of Obesity and Non-communicable Diseases (C-POND)- Dr Jillian Wate – will lead the identification stage (gathering and initial analysis of data and literature) with support from Dr Patrick Harris (Sydney University), Prof Sharon Friel (ANU), and Dr Wendy Snowdon (WHO).

<u>Tasks for the advisory and stakeholder group</u>

- Provide input via workshops
- Provide expert advice as necessary

- Finalise the draft HIA report
- The advisory and stakeholder group will meet twice to focus on the HIA, in Sept and Nov 2015.
- The HIA will become a standard agenda item for monthly FT TAG meetings between Oct and Jan to discuss progress.

Values

Health Definition: the project utilises wellness model of health focussing on the determinants of health and equity.

Equity Definition: the project will assess different impacts on different groups and determine if benefits/costs may be experienced to a greater extent by one group and not others, and what actions might be taken to maximise positive and mitigate negative health impacts.

Evidence: Value will be placed on all sources of information. The focus is on secondary data (i.e. which has already been collected and / or analysed).

Recommendations: These will be made in a report, reviewed and accepted by FT-TAG, and utilised by them to support their work in relation to the regulations.

HIA Method

The process of the desk based HIA will comprise

- Relevant burden of disease and census data
- Other existing secondary data sources including
    - Sponsorship investment – Fiji secondary school athletics
    - Consumer Council of Fiji – TV advertising numbers, (lunchbox study)
    - Adolescent obesity / all child age group BMI
    - School health program
    - Fiji Oral Health survey
    - Community health demographics
- Reviews of the literature (peer reviewed and publicly available grey and policy literature)
- Development of a matrix to assess impacts of the regulation
- Stakeholder analysis
- Recommendations developed and signed off by the advisory and stakeholder group

Deliverables/Outputs

- Records of actions from meetings
- Review of existing data and literature
- HIA matrix grid
- Recommendations
- Final HIA report

Project Funding

The project is being funded by World Health Organisation.

Evaluation Plan

1. Process evaluation:
    a. Feedback from advisory and stakeholder group relating to the process
2. Impact evaluation:
    a. C-POND explore link for an impact evaluation within the Centre for Research Excellence (CRE) project

Timelines

See Project plan

Intellectual Property

- IP is owned by the World Health Organisation

Changes to these Terms of Reference

Changes may be made to these Terms of Reference by agreement within the advisory and stakeholder committee?

Appendix two: Workshop agendas

Draft Agenda: Workshop 1 - A health impact assessment on the draft regulations on marketing of food and non-alcoholic beverages in Fiji

October 1st 8.30 to 4.30 p.m

8.30 to 9	Introductions and expectations
9 to 9.30	Background to draft regulations (presenter TBC)
9.30 to 10	Introduction to HIA – what is it and what are the main steps
10 – 10.15	Break
10.15 – 10.30	Example: The Transpacific Partnership Agreement HIA
10.30 – 12	Group exercise – working through the steps of an HIA
12-1	Break
1 – 2	Group discussion: What areas should the HIA focus on? What information can inform the assessment?
2 – 2.15	Introduction to terms of reference for an HIA
2. 15 – 3.15	Group work: Developing terms of reference for the HIA
3.15 – 3.30	Break
3.30 – 4.15	Revisiting the assessment step: the stage where the information is brought together to predict impacts
4.15 – 4.30	Next steps / revisiting expectations / close

Agenda: Workshop 2 - A health impact assessment on the draft regulations on marketing of food and non-alcoholic beverages in Fiji

October 30th 8.30 to 4.30 p.m and November 1st, 8.30 to 12.30)

WHO Module 3 conference room

FNPF plaza 1, level 4

Purpose: The workshop will navigate the evidence summaries to develop recommendations for progressing the food and beverage advertising regulations in Fiji

Day One

8.30 to 9	Purpose, Introductions and expectations
9 to 9.15	Recap on HIA
9.15 to 9.30	Fiji work in the international food policy space (Sharon Friel)
9.30 to 10	Overview of the assessment step
10 – 10.15	Break
10.15 – 10.30	Overview of the evidence as a whole
10.30 – 12	Group exercise (2 groups) – work through the assessment matrix o Mass media advertising o Sponsorship or promotion at children's activities/events o School based promotion
12-1	Break
1 – 2.30	Group exercise contd (2 groups) – work through the assessment matrix o Rewards and prizes o Food labelling o Signage
2.30 – 2.45	Recap: Making and prioritising recommendations
2. 45 – 3.15	Revisiting the stakeholder analysis
3.15 – 3.30	Break
3.30 – 4.30	Group work: Recommendations o Mass media advertising o Sponsorship or promotion at children's activities/events o School based promotion

Day Two

9 to 10	Group work: Recommendations o Rewards and prizes o Food labelling o Signage
10 – 10.15	Break
10.15 – 11.15	Prioritising the recommendations
11.15 – 12	Evaluation
12 – 12.15	Next steps and actions

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The Menzies Centre for Health Policy is a collaborative Centre between The Australian National University and the University of Sydney. It aims to provide the Australian people with a better understanding of their health system and what it provides for them. The Centre encourages informed debate about how Australians can influence health policy to ensure that it is consistent with their values and priorities and is able to deliver safe, high quality health care that is sustainable in the long term.

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- **undertakes comprehensive research projects on health policy issues.**

For more information

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