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Development of the good food planning tool: A food system approach to food security in indigenous Australian remote communities

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ABSTRACT

Few frameworks exist to assist food system planning, especially for Indigenous Australian remote communities. We developed a Good Food Planning Tool to support stakeholders to collectively plan and take action for local food system improvement. Development occurred over a four-year period through an evolving four phase participatory process that included literature review, several meetings with representatives of various organisations and communities and application of the Tool with multi-sector groups in each of four Indigenous Australian remote communities. A diverse range of 148 stakeholders, 78 of whom were Indigenous, had input to its development. Five food system domains: (i) Leadership and partnerships; (ii) Traditional food and local food production; (iii) Food businesses; (iv) Buildings, public places and transport; (v) Community and services and 28 activity areas form the framework of the Tool. The Good Food Planning Tool provides a useful framework to facilitate collective appraisal of the food system and to identify opportunities for food system improvement in Indigenous Australian remote communities, with potential for adaptation for wider application.

1. Introduction

Local food systems for Indigenous Australians have changed significantly in recent history (Lee, 1996). Indigenous Australian remote communities now depend largely on store purchased foods and to a lesser extent on traditionally collected foods and locally produced foods (Brimblecombe et al., 2013). Change in local food systems has come at a great cost to the health of communities and individuals, with food insecurity (AIHW, 2011) and diet-related conditions (such as overweight, obesity, cardiovascular disease, type 2 diabetes) now major contributors to the serious health gap between Indigenous and non-Indigenous Australians (Vos et al., 2009).

It is well accepted that reliance on individual level approaches and/or a focus on mechanisms within a single area of the food system are not enough to improve food security and stem burgeoning diet related conditions; major changes to the food environment are necessary (Swinburn and Egger, 2002). This requires taking a holistic view to consider the multiple areas of the food system and to change the relevant societal, economic and physical drivers in a direction that is health promoting (Signal et al., 2013). The ways to do this are not straightforward as food environments are complex and dynamic (Swinburn et al., 2005). Evidence-based strategies for addressing the burden of diet-related conditions are also limited (Swinburn et al., 2005; Giskes et al., 2007, 2011; Holsten, 2009; Caspi et al., 2012). Decision-making processes that combine best available evidence and local knowledge to develop a course of action and to create new perspectives and narratives that impact on how people think and act are receiving increasing attention (Swinburn et al., 2005; Bushe and Marshak, 2009; Edvardsson et al., 2012). These approaches are believed to have the greatest chance of responding to the changing nature of the food environment and in developing strategies that are comprehensive, contextually relevant and suited to the community of concern (Swinburn and Egger, 2002).

In the context of Indigenous Australian remote communities, two innovative system approaches to planning that have potential application to local food systems have been used to improve quality of primary health care and essential service delivery (Bailie et al., 2007; McDonald et al., 2013). These draw on the principles of quality improvement and participatory learning

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(Bailie et al., 2013; WHO, 2007) and use a systems assessment tool to support stakeholders to collectively appraise practice against a pre-defined set of best practice goals (Bailie et al., 2007). From this, an action plan is developed and data on practice and outcome measures are collected to provide feedback on performance. A cornerstone of these system approaches is the focus on achieving quality improvement through a structured ongoing cycle of participatory assessment, planning and action, to achieve step-by-step incremental improvement. Through this process of discussion and analysis stakeholders incrementally build their knowledge of the nature of the system and how it behaves.

As far as we know there have been no initiatives in the Indigenous Australian remote community context that have sought to engage a group of stakeholders at the local level in a systematic and ongoing process of decision-making for food system improvement. Yet the few community-based interventions in this context shown to positively impact on diet-related conditions point towards the importance of addressing multiple areas of the food system (Lee et al., 1994; Rowley et al., 2000; Black et al., 2013a, 2013b), and involving local stakeholders and community leaders in planning, implementation and evaluation activities (Black, 2007).

The unique history, governance structures and other characteristics of the food environments of Indigenous Australian remote communities need to be considered in food system decision-making processes as these can offer both opportunities and challenges. Different geographical locations exhibit unique characteristics that necessitate special consideration. There are over 160 discrete communities in remote Indigenous Australia with populations of more than 100 people that are located over vast tracts of the nation and are geographically isolated from larger urban centres (ABS, 2010). These communities have all experienced a recent history of European invasion, colonisation and oppression and continue the struggle of retaining their culture and rights in a wider society where a western worldview dominates. Communities have retained structures of Indigenous leadership that co-exist with non-indigenous governance structures. Further important characteristics are that most communities are small in population size and yet have a large ratio of and high turnover of non-Indigenous service providers (such as medical professionals, public health nutritionists, aged-care managers, horticulturalists, store managers) per capita; and, also, that food hunting and gathering plays an important economic, dietary and cultural role in most communities. The few food environment related assessment tools (Wood and McDowell, 2009; Swinburn et al., 1999; DFID, 2013; Tansey and Worsley, 1995; Kelly et al., 2011; McKinnon et al., 2009; Pomerleau et al., 2013; Glanz et al., 2007; NEAT, 2014) that exist do not capture all elements of this unique environment nor have they been purposefully developed as part of an integrated quality improvement process.

In response to a heightened interest to redress food security in Indigenous remote communities by the Australian government and community leaders seeking opportunity to 'have a say' in the development and implementation of food security initiatives, we aimed to develop a tool structure and implementation approach that would enable the engagement of community people and other stakeholders to identify gaps, barriers and opportunities for improvement of the food system, as part of an integrated quality improvement process. The development of the Good Food Planning Tool (GFPT) occurred as part of the Good Food Systems: Good Food for All Project (GFS Project)—a five-year case study (2009–2013) that aimed to assist stakeholders, including Indigenous community residents, to collectively identify food system challenges and opportunities to improve food security (i.e., food availability, access and utilisation) over time. This article describes the development of the GFPT and its implementation in four communities.

2. Methods

2.1. Good food planning tool development: Evolving participatory process

The GFPT evolved through a four phase participatory process as shown in Table 1. It was informed by multiple sources of data collected through literature review, expert review of an early version of the GFPT, four stakeholder meetings with Indigenous and non-Indigenous stakeholders (for test of relevance and validity), application with food interest groups in each of the four Indigenous communities as part of the GFS project (for test of application), and experience gained by all.

2.1.1. Study setting

Two of the Indigenous Australian remote communities that participated in the GFS project and whose members contributed to the development of the GFPT were situated on the North Australian coast, another was inland from the coast and a fourth was in the Central Australian desert. The communities varied in size

Table 1
Outline of the GFPT development phases and associated dates, activity and aim.

Phase	Date	Activity	Aim
Phase 1: Development	April-Sept 2009	Literature review Expert review $n=22$ (2 Aboriginal participants)	Determine food system domains, activity areas, corresponding best practice characteristics and application process
Phase 2: Test of relevance	29th Sept 2009 16th-17th Feb 2010	Meeting 1[a] [b] $n=13$ (3 Aboriginal participants) Meeting 2[ab] $n=27$ (15 Aboriginal participants)	Check the activity areas and corresponding best practices with food delivery, food retail and food policy experts Check all aspects of the tool
Phase 3: Test of validity	2nd-4th Nov 2011	Meeting 3[a] [b] $n=20$ (14 Aboriginal participants)	Inductively identify activity areas and corresponding best practice characteristics for each food system domain Compare and contrast these against GFPT
	Annually 2010-2013	Annual planning meetings with community-based food-interest groups in each of the four communities[a] $n=26$-42	Determine and test process for Tool application
Phase 4: Refinement	Sept 2012	Data review	Review all data for any emerging and/or divergent food system domains, activity areas or best practice characteristics
		Meeting 4[a] $n=7$ (4 Aboriginal community coordinators)	Check terminology and graphics

[a] Participant numbers include the facilitators and/or members of the research team who also provided expert content knowledge.
[b] These meetings were all urban-based in contrast to the annual planning meetings that were community-based and community specific.