FOOD AND REMOTE AUSTRALIA

A ‘fresh’ perspective on closing the gap

Anna-Louise Bayfield

Setting the scene: Questions evoked by travelling to remote Australia

How do we ‘Close the Gap’?

If you are a member of the Australian health care system you have undoubtedly asked this question at least once. Perhaps a question less frequently considered is: how do fresh fruit and vegetables travel to remote, Central Australia, and what are they like when they arrive? The significance of this question may not seem apparent at first, but given that an estimated one-fifth of the burden of disease of Indigenous Australians is attributable to a poor diet low in fresh fruit and vegetables,[1] and given that 19% (148,700) of these Australians live either remotely or very remotely,[2] perhaps the answer is worth exploring.

To aid this exploration, let us envisage the journey of an avocado from its production point to remote Central Australia. Avocados are not grown in the remote communities of Central Australia; the land is arid and economically unviable from a large-scale commercial perspective, and gardens though desirable, are scarce.[3] The avocado is hence imported from elsewhere, most often from larger centres, like Alice Springs or Darwin. This is not often an easy task. In the vast, 1.3 million square kilometres of the Northern Territory,[4] swaths of remote land are serviced by unsealed roads that may be closed during the wet season. If road travel is eliminated, the avocado must come by charter plane or barge service. The company running this service may have a monopoly, which combined with inelastic demand results in high transport prices. On the way, freight difficulties or frequent stops may disrupt the cold chain and reduce the shelf-life and quality of the avocado. If and when the avocado ar-
rives, it arrives to a single, local community store. This store must operate as a viable business and is often the only store servicing a small community. There is no competition, and there are very high operating prices. The avocado arrives over-ripe, perhaps bruised in some areas, and the price sticker attached to it is much heftier than where it started.

Though the journey of this avocado was a theoretical one, each of the difficulties faced have been well described in the literature documenting food supply to remote Australia,[3,5,6] and the outcome is far from theoretical. I learnt this personally after accompanying a visiting cardiologist to 3 remote Aboriginal Australian communities in Central Australia during April 2019. There were no shortage of patients, with high rates of poorly controlled diabetes, obesity and ischaemic heart disease. All 3 of the communities were "dry" meaning that alcohol was not permitted. Through taking dietary histories, I found that while patients were aware of what constituted a nutritious diet, there were nonetheless high rates of consumption of “takeaways” – ready-to-eat hot meals sold at the community store, items such as meat pies and pizzas – and products high in refined sugars, such as sugar-sweetened beverages (SSB), compared to fruits and vegetables.

Was this an issue of poor choices or was something else at play?

In each community, there was a single store supplying the vast majority of food to the population. By attending and reviewing each of the 3 stores, I discovered an unambiguous answer to this question. Each store demonstrated a trifecta of food insecurity consisting of:

1. Consistently higher prices of nutritious food
2. Evidence of poorer quality food (Figure 1), and
3. Reduced supply of nutritious foods (Figure 2).

**Expanding the scope: From personal experience to endemic failure in Indigenous Australian Healthcare**

This trifecta of food insecurity is not an isolated phenomenon in Australia.[3,5,6] Research consistently finds that healthy food baskets cost 20–43% more in remote areas compared to major cities.[5] Fresh food is more likely to be of poorer quality,[6] and communities can go days or weeks without fresh produce due to transport delays.[5]

The stagnant, seemingly unmovable gap in life expectancy between Indigenous and non-Indigenous Australians of approximately 10 years is well known.[7] Eighty percent of this health gap is estimated to be due to chronic diseases including diabetes and ischaemic heart disease.[5] The following data are worth emphasising, despite being less publicised:

1. More than half (59%) of Indigenous Australians living in very remote Australia are estimated to be on the lowest quintile of equivalised household income.[8]
2. In 2010, families receiving welfare in remote communities in Western Australia would need to spend 50% of their disposable income to afford a healthy diet. For a non-Indigenous, non-remote Australian family with an average income, this number was 16%.[6]
3. Only 6% of remote Aboriginal Australian households have “health hardware”; that is, infrastructure necessary for the preparation and storage of perishable food, such as refrigeration, a functioning stove and a sink.[6]

<table>
<thead>
<tr>
<th>Product</th>
<th>Store 1</th>
<th>Store 2</th>
<th>Store 3: Alice Springs Woolworths</th>
<th>South Yarra Woolworths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strawberry punnet 250g</td>
<td>$8.37</td>
<td>$3.50</td>
<td>$3.50</td>
<td>$3.50</td>
</tr>
<tr>
<td>Red capsicum each</td>
<td>$6.90</td>
<td></td>
<td>$1.78</td>
<td>$2.67</td>
</tr>
<tr>
<td>Green capsicum each</td>
<td>$4.40</td>
<td>$3.70</td>
<td>$1.73</td>
<td>$1.98</td>
</tr>
<tr>
<td>1kg carrots</td>
<td>$3.00</td>
<td>$3.65</td>
<td>$1.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>Cauliflower each</td>
<td>$6.10 (half)</td>
<td>$4.40 (half)</td>
<td>$2.50 (whole)</td>
<td>$4.90 (whole)</td>
</tr>
<tr>
<td>Shepard avocado each</td>
<td>$3.90</td>
<td>$4.50</td>
<td>$2.50</td>
<td>$2.50</td>
</tr>
<tr>
<td>Broccoli 300g</td>
<td>$4.70</td>
<td></td>
<td>$2.01 (340g)</td>
<td>$1.47</td>
</tr>
</tbody>
</table>
What do these pieces of information mean when laid out side-by-side on the red dirt of remote Australia? Current efforts to improve Aboriginal Australian health focus on nutritional education, such as the Aboriginal and Torres Strait Islander component of Go for 2 & 5 fruit and vegetable promotion.[9] These efforts attempt to educate a group of people with high rates of poverty to buy food that is expensive, a day away from going rotten, and may not even be available on the shelf at all. If these people do decide to purchase the expensive, poor quality food, only 6% have the means to cook the food or store it for more than a few days.[5] Indeed, is it any surprise the diet of this group remains obstinately poor?

A review of the solutions: Nationwide and local responses

National responses

Whilst there have been several attempts to address food security in remote Australia in the recent past systematically, most have been marred by inadequate resourcing and premature abandonment.

The Commonwealth Government-funded National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP) ran between 2000-2010 and outlined a scaffolding for states and territories to collaborate with an aim to improve food security in remote Australia. A notable achievement was the Remote Indigenous Stores and Takeaway Project (RIST) which included guidelines for stocking healthy foods and marketing strategies to promote its consumption. Point-of-sale data was also collected in order to monitor community consumption of healthy foods.[6] This data can provide food spending patterns and nutrient profiles and has been recommended as an effective and cheap way to analyse community response to food policy.[10] Since its completion in 2010 there has been no ongoing funding or review of the NATSINSAP.[5]

The 2008 House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs report “Everybody’s Business” gave 33 recommendations for improving community stores, including government subsidies for freight charges, increased store licensing and government partnership with individual communities in the decision-making process. This report received no formal response.[3,5,6,11]

The 2009 Council of Australian Government’s National Strategy for Food Security in Remote Indigenous Communities outlined a nationally-coordinated approach between the states to improve health outcomes, including a national quality improvement scheme for stores, increasing the Indigenous Australian nutrition workforce and a national healthy-eating action plan. The 2014 audit of the strategy found that of the 5 intended goals with a mid-2010 expected completion date, only 1 had been completed. The audit concluded that “overall, the administration of the food security initiatives over time has been mixed”. [11]

Licensing of stores is an approach introduced by the Commonwealth Government in the Northern Territory in 2007. Once licensed, stores are assessed periodically against health-based licensing requirements and, if required, receive funding for initiatives to help meet these requirements. This policy has demonstrated positive results, including improved availability and quality of nutritious food, and of note, was reformed and renewed by the government in 2012 for 10 years.[12]

Local responses

In the absence of a coordinated national response since 2010, a number of strategies aimed at improving food security through targeting local communities have emerged, with outcomes worth examining.

Outback Stores is a Commonwealth-owned company established in 2006. The company is premised on enabling local communities to voluntarily sign

Figure 1: Fresh produce available at an unidentified community store in Central Australia in April 2019

The avocado arrives over-ripe, perhaps bruised in some areas, and the price sticker attached to it is much heftier than where it started.
on to a long-term management agreement, which then converts their community store to an “Outback Store”. This store is still community-owned and operated, but external management and standardised store policies are implemented to ensure the stock and quality of healthy foods. The company board is composed of Woolworths and Coles executives who are able to utilise established supplier networks to negotiate with freight companies.[3,6]

While the government-subsidised company aims to be self-sufficient and profitable, it has received $77 million of government funding so far.[6] This funding has been injected into initiatives including employing on-site nutritionists, implementing a point-of-sale system to monitor store performance, as was used as a part of the RIST project, and overcoming losses in stores deemed economically unviable due to market failure.[3,6] The variety and quality of healthy food has improved under Outback Stores. [3,13] The stores have seen a consistent decrease in SSB sales and an increase in fruit and vegetable sales. Further, 85% of Outback Stores staff identify as Aboriginal Australian or Torres Strait Islander. [13] However, several problems have been highlighted, the most poignant of these being the relative disempowerment of the community. While Outback Stores aim to work with individual communities, ultimate management control is signed over to a government body.[3,6]

The Mai Wiru Regional Stores Aboriginal Corporation is a not-for-profit organisation with similar goals to Outback Stores, established by the local Aboriginal health council and communities spread over the Anangu Pitjantjatjara Yankunytjatjara (APY) lands in South Australia.[14,15] Mai Wiru (MW) currently operates 9 stores, and its board members are made up entirely of Aboriginal Australian members of the APY lands. MW stores are government-independent and must remain financially viable without assistance.[16] Despite this, MW stores have been found to achieve better relative affordability of healthy foods when compared to Outback Stores and have substantially improved nutritious food accessibility. Road trains have delivered supplies weekly instead of fortnightly since 2005 and more than 98% of all recommended healthy food items are consistently available on MW shelves. In saying this, in April 2014 the price of a standard Market Basket of “healthy foods” in MW stores was still 35% more than the large supermarket in Alice Springs. Furthermore, there have been no significant dietary improvements within the APY lands. Energy dense ready-to-eat takeaway options and items high in refined sugar remain in high demand. These items have incredibly high profit margins driven by multinational food companies. Without government subsidisation MW stores are more vulnerable to market pressures.[14]

Looking to the future

I am under no impression that there is a simple solution to the problems outlined by this article. However, what is simple is this: people cannot eat food they cannot access. Remote Central Australia is a giant red amphitheatre, where the blaring sun shines a brutal spotlight on chronic disease. In 2008-09, the hospitalisation rate for regular dialysis treatment among Indigenous Australians was 11 times the rate of other Australians.[17] In many remote communities, the lifestyle factors contributing to this crisis may include alcohol but are also intrinsically linked to food. Nutritional education alone will not improve food security or change diet practices. Remote Australia has unique and specific challenges to food supply that can be targeted by market intervention. This intervention cannot be intermittent or short term and must rely on continuous and accurate auditing of data. It is essential these actions are taken in consultation with the local communities, not simply because this strategy is empowering but because it works better.

Our previous efforts offer a promising framework, yet my own experience with the Australian outback tells me we need to do better. Simple, coordinated measures including providing funding to Mai Wiru and similar projects, allocating subsidies for fresh produce where appropriate, strategic partnerships with the food industry to improve the efficiency and quality of transportation, and consistently au-
diting data from licensed stores are ways we can ensure that if you live in remote Australia you can afford and have access to an avocado worth eating. These are achievable, inexpensive efforts. In the 2017-18 financial year Outback Stores spent AU$1.76 million on economically unviable stores while the rest ran to profit, an average of $392 per community member.[13]

Allowing remote communities to access affordable, good quality, nutritious food in no way ensures that the diets of these communities will improve, but not having access is a nonstarter. Food security enables the possibility of change, which is an excellent place to start.

Anna is a final-year Monash student enthusiastic about the unlikely, yet riveting combination of critical care and public health. She is an insatiable reader with a love of writing and a passion for medical education, particularly mentorship amongst junior and senior doctors.

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Correspondence
albay5@student.monash.edu

References


