

Developing culturally appropriate food literacy resources for Aboriginal children with Foodbank WA's *Superhero Foods*[®]

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Abstract

Issue addressed: In Australia, food sovereignty of traditional landowners has been marginalised by the globalisation of food systems and resulted in limited opportunities for children to experience familiar bush tucker foods as healthy choices, particularly in a school environment. *Superhero Foods*[®] themed teaching resources focus on the development of nutrition education materials that included traditional Aboriginal foods together with contemporary foods readily available in regional/remote communities.

Methods: Consultation with an Aboriginal expert and Aboriginal artist; local, regional/remote teachers and stakeholders informed the development of tailored resources including food cartoon characters, school lesson plans and a storybook. The latter was guided by a resource development model. Users of the resources were surveyed to ascertain the useability, alignment with the Australian Dietary Guidelines, cross-curricular learnings and cultural relevance.

Results: Respondents across regional/remote and urban locations completed a lesson plan and food character (clipart) survey (N = 51) and storybook survey (N = 14). Respondents advised the resources were relevant, enjoyable, engaging and culturally appropriate for all students regardless of Aboriginality. The resources provided learning opportunities for all children to enhance knowledge about Aboriginal culture and bush foods. Independent evaluation has further indicated the translation of messaging into student's knowledge and learning.

Conclusions: Key enablers to the success of the resource included; free online access, the highly engaging nature of the resources and adaptability to be implemented across a number of Aboriginal language groups in WA. Ensuring visual representation of healthy choices was fundamental to reinforcing nutrition messaging. *Superhero Foods* resources are a positive and important inclusion in the health promotion toolbox for Aboriginal children.

So what?: *Superhero Foods* are novel nutrition education resources depicting Aboriginal foods and Aboriginal children. These food literacy resources will engage children's

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understanding of Aboriginal culture, improve food literacy and strengthen equitable access for regional and remote communities.

KEYWORDS

Aboriginal and Torres Strait Islanders, children, health education, health promoting schools, nutrition

1 | INTRODUCTION

Foodbank has been fighting hunger in Western Australia (WA) since 1994. In 2020, Foodbank sourced and distributed enough food to provide 6.4 million meals to feed over 900 registered charities.¹ Foodbank WA's *School Breakfast Program* provides an additional 2.7 million serves of breakfast foods to over 475 schools, which is a challenging endeavour within a state, with a land mass of more than 2.5million square kilometres.² Foodbank is committed to improving food literacy and health outcomes of Western Australians by implementing a range of nutrition education programs that promote healthy eating and cooking amongst vulnerable children and adults.³ Collectively known as *Food Sensations*[®], Foodbank's suite of evidenced-based food literacy programs are aligned with the Australian Dietary Guidelines⁴ and address the health inequality of WA people facing social and economic disadvantage, while supporting mainstream healthy nutrition messaging. Approximately 25 993 school aged children have participated in a total of 1134 *Food Sensations* for Schools sessions from 2014 to December 2021 across WA.¹

The Foodbank WA healthy eating initiatives,³ including *Superhero Foods* resources, targets some of the most disadvantaged students with 60% of schools registered for Foodbank's *School Breakfast Program* in regional and remote areas. Aboriginal children account for a high proportion of students accessing the *School Breakfast Program*, accounting for 28% in metropolitan schools to 97% in very remote schools in 2016.⁵ In addition, 82% of schools are within the Index of Community Socio Educational Advantage (ICSEA) decile ranking of six to ten.⁶ ICSEA is a scale that represents levels of educational advantage and facilitates fair and meaningful comparisons of school performance. Schools ranked between decile six to ten (inclusive) are regarded as 'low ICSEA' and disadvantaged.⁶ Research indicates the value of the inclusion of culturally appropriate health literacy materials allowing targeted support for Aboriginal students and health educators living in regional and remote areas.⁷ As such, a decision was made to extend the efficacy of the existing food literacy resources to include cultural themes and food characters that supported Aboriginal children to learn and secondarily for all children to learn about Aboriginal foods and people.

The *Superhero Foods* resources were developed in 2014 to support the *School Breakfast Program* and the *Food Sensations* for schools program.^{5,8,9} The concept aimed to increase primary school aged children's food literacy including knowledge, attitude and skills towards healthy food and cooking ability. Schools have been identified

as important learning environments to improve food literacy.¹⁰ Food literacy is defined as a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat foods to meet needs and determine food intake.¹¹ Food literacy incorporates nutrition education to support an individual's ability to understand the importance of choosing healthy food.¹¹ Improving food literacy underpins Foodbank's *Food Sensations* nutrition education and cooking programs. The concept uses cartoon characters representing healthy foods aligned to the Australian Dietary Guidelines.¹² Testimony to the application of *Superhero Foods* to health promotion principles, the *Superhero Foods* initiative was recognised by the Australian Health Promotion Association WA branch with an 'Excellence in Health Promotion Practice' Award in 2018. Evaluation data supports this excellence and has demonstrated that the *Superhero Foods* concept supported increased students' knowledge and positive attitudes towards healthy eating supporting students to make the connection between food choice and improved health. Specifically there was a significant increase in primary and secondary school students reporting choosing *Superhero Foods* post participation in a *Food Sensations* program.^{8,9}

1.1 | Target audience

Aboriginal children and young people are among the most vulnerable of students at educational risk⁵ and face many health inequalities compared to their non-Aboriginal counterparts.^{13,14} Pollard argues a key issue resulting from health inequalities, particularly among vulnerable populations such as children, is food insecurity.¹⁵ This occurs when people do not have access to affordable nutritious food to support their health and wellbeing. Without reliable access to nutritious, safe and acceptable foods, with consistent availability, access and utilisation for consumption, food security will be compromised.¹⁶

For Aboriginal children inadequate nutrition and inactivity in childhood has been associated with a greater lifetime risk of chronic diseases such as heart disease and type 2 diabetes,¹⁷ increased overweight and obesity¹⁸ and risk to dental health.¹⁹ People living in regional and remote areas are particularly susceptible to health inequalities given the social and economic disadvantage associated with living in these areas.²⁰ Further, regional and remote children are at a disadvantage regarding access to healthy food options including; limited food availability, particularly food products in line with the Australian Dietary Guideline recommendations.^{21,22}

Within contemporary Aboriginal food practices traditional foods hold important cultural value for Aboriginal people and there is some evidence that hunting and collecting continues today.^{23,24} In some communities foods such as monitor lizards and kangaroo are sometimes used as substitutes for store bought meat when families have limited financial resources to purchase foods, however traditional foods are not widely consumed.²³

It has been suggested that food sovereignty can help restore the knowledge and cultural importance of indigenous food systems.²⁵ However the globalisation of food systems and a shift to a reliance on processed foods has resulted in a lack of cultural understanding regarding the healthfulness of traditional Aboriginal foods and a lack of visibility of traditional bush foods in Australian society.²⁵ In turn, the mainstream absence of these foods is a potential barrier limiting Australian Indigenous communities from engaging in health programs and strategies that employ the use of traditional Aboriginal foods.²⁶ Consistent with findings from recent reviews by Browne et al²⁷ and verified by Lee and Ride,¹⁷ is the paucity of evaluated food and nutrition programs specifically targeting Aboriginal youth. Colles⁷ supports the inclusion of nutrition resources acknowledging the cultural and nutritional value of traditional foods, including those with health and healing properties. This paper will demonstrate the rigorous development process and usefulness of the implemented *Superhero Foods* resources for Aboriginal students to provide support to help address this gap.

1.2 | Theoretical Underpinnings

Health literacy can be referred to as the personal, cognitive and social skills which determine the ability of individuals to gain access to, understand, and use information to promote and maintain good health.²⁸ Improving access to health information and the capacity to use information to promote and maintain good health education provides opportunities for improved knowledge and self-efficacy, changing attitudes and motivations to health behaviours. Implications for health promotion action have been conceptualized by Nutbeam into three levels of health literacy including; functional (basic literacy and numeracy skills), interactive (interact, communicate and apply to change behaviour) and critical (evaluate and reflect upon information to make decisions about health).²⁸ Research shows this hierarchical model of health literacy can also be applied to food literacy where interventions should aim to improve students higher level skills and competencies that lead to critical decision making around food.²⁹

Health literacy within a school-based setting can be strengthened with the use of a whole school approach, which is supported by the school environment through policies and practices and reinforced by teachers, parents and the broader school community.³⁰ Cross-curriculum integration can build children's skills and transferability and reduce barriers commonly incurred by teachers to implementation of health literacy interventions, such as; lack of time and health low in priority.³⁰

The development of applied educational resources from purposeful guidelines are needed to meet the needs of Aboriginal children and young people. This includes reference to the Australian Curriculum teaching and learning frameworks³¹; the WA Department of Education Aboriginal Cultural Standards Framework³² as well as the Department of Health's WA framework for supporting strength based early intervention for health and wellbeing.^{31,33} The New Zealand Rauemi Atawhai Health Education Resource Model³⁴ provides a staged approach to health resource development, informed by the target audience with guiding principles to "be prepared; be clear of your audience and your key messages; be open; be relationship focused; be accountable; accessible and test, test, test with your audience and stakeholders".³⁴ p28

1.3 | Cultural underpinnings

Culture-based education should ensure the experiences provided for children reflect, validate and promote culture and language as well as being reflective of Aboriginal children's preferences and current circumstances.³⁵ It is important resources include representation of Aboriginal and Torres Strait Islander perspectives including language, diversity and positive portrayal of culture, developed in consultation with Aboriginal people.³⁶ The expected standards within WA education is that teachers know the curriculum content and know how best to teach it using resources for Aboriginal students to address learning needs.³² Suitable teaching pedagogy including the traditional Aboriginal practice of storytelling can be translated to children's storybooks to highlight the importance of Aboriginal culture. Storytelling or yarning can give meaning and generate interest for various issues, including those linked to food and health.^{7,24} Using culturally appropriate narratives, with a focus on pictorial representation and Aboriginal artwork allows for an understanding of familiar foods. Use of characters and settings relevant to the target audience can improve knowledge, attitudes and promote behaviour change for children.³⁷ A narrative approach to health promotion can illicit greater emotional responses and trust, increased engagement and retention of the key messages for the audience.³⁸

1.4 | Schools setting

Schools have long been recognised as a supportive setting for targeting personal and social development through the provision of information and education which promotes health. Whole-school approach embodied by the health promoting school (HPS) model, is increasingly being endorsed as an effective way to promote nutrition and healthy eating in the school setting.³⁹ This model targets the important predictors of healthy eating among school children; that is knowledge, accessibility and preferences.³⁹ The Australian curriculum provides learning opportunities to engage children in Aboriginal and Torres Strait Culture and Histories.^{32,39} Teaching approaches that include cross-curricular and experiential learning,

that engage students through learning by doing and by reflecting on the experience, have been shown to be the most effective evidence-based strategies for improving healthy eating in school children.³⁹ Integrating nutrition interventions within other subject areas that may traditionally have been seen as more 'academic' subjects may overcome barriers and provide more support for healthy eating interventions. For example, to support teaching and learning Aboriginal languages within the WA curriculum, teachers can provide opportunities for students to view a demonstration, such as cooking bush tucker or cooking in an earth oven, and recording key words/phrases related to processes associated with the collection and preparation of food.⁴⁰

The aim of this health promotion initiative was to develop a rigorous resource implementation and review process to support the development of new Aboriginal focused *Superhero Food* resources; evaluate the useability and appropriateness of resources for teachers, health professionals and their student audience; and identify barriers and enablers of implementing *Superhero Foods* resources in the classroom. This paper describes the processes undertaken to develop food literacy resources that will support and guide other health professionals seeking to develop similar culturally specific Aboriginal resources.

2 | METHODS

2.1 | Resource development process

This project provided the opportunity to develop resources that portray bush foods, cooking methods and seasonal attributes, which would be highly valued for social, taste and health properties by an Aboriginal audience. *Superhero Foods* health education resource development included stages outlined in Figure 1, and modified from the Rauemi Atawhai Health Education Resource Model developed by the New Zealand Ministry of Health.³⁴ This model provided a framework for developing the capability of health care professionals to recognize and develop health literate, culturally competent health education resources and systems.⁴¹ For this project, the model was adapted to guide the resource development with meaningful input from health educators, with the aim of providing resources and information that was relevant, understandable and useful for the intended audience.

The following sections outline the seven stages of the resource development process which considers health literacy, cultural relevance, accessibility with online delivery and expert consultation suitable for the target audience.

2.1.1 | Stage 1 research need

A desktop resource audit of the existing *Superhero Foods* resources and scoping review of the needs for the resource was carried out. Hill et al⁹ reported on the existing *Superhero Food* resources, outlining

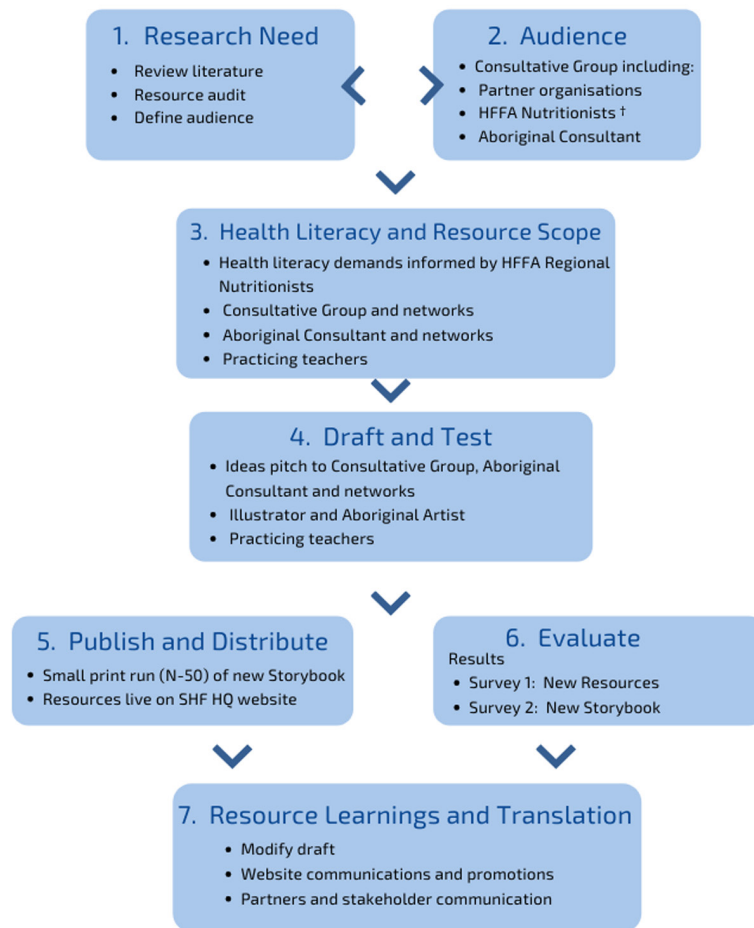
that "The kids...love the place mats - every day they sit down to eat they look at their place mats and talk about the characters to each other in language, sometimes asking me what a particular food/character is." (Very Remote School Respondent).⁹ p45 The (placemats) stimulated discussion by Aboriginal students in their language about *Superhero Foods* characters, and the limitations to what foods they recognised within their own very remote community. A need for resources for Aboriginal audiences has previously been identified and reported.⁴²

2.1.2 | Stage 2 audience

A consultative group was established to guide the educational and health needs, determined from their networks. The representatives included an Aboriginal consultant, public health nutritionists from the Foodbank WA Healthy Food For All (HFFA) team and practitioners from existing partnership organisations including Public Health Units from WA Country Health Service (WACHS) in the Kimberley, Great Southern, Wheatbelt, Goldfields and the Pilbara regions. Members of the consultative group were selected based on their experience with working with and alongside the target group in regional locations throughout WA, together with qualifications and expertise in the field of nutrition and health promotion. WACHS staff included health promotion officers, nutrition coordinators, dietitians, program coordinators, education officers and paediatric nutritionists. A sample of group members from each region were included to support co-design to ensure consultation was representative of each regional location. Early-stage resource ideas were shared with the representatives who were provided an information sheet and consent form to ensure they were aware of how the consultation process would occur, what would be required of them and how the information collected would be used and reported.

2.1.3 | Stage 3 health literacy and resource scope

The health literacy demands of the audience and resource scope stages were combined in refining the resource development model³⁴ to suit this project. This stage provided opportunity for external input into identifying the needs, knowledge and accessibility of food for the target audience which would inform the planning and development of resources. Regional HFFA nutritionists with considerable experience working closely with the target group provided further input to aligning resources to the Australian Dietary Guidelines and the health literacy needs of the target group. A professional illustrator was engaged to develop culturally and visually appealing cartoon characters and images representing healthy foods and discretionary foods, and characterised bush foods and store-bought foods readily available in regional and remote areas of WA. Familiar Aboriginal artworks and seasons were incorporated into resources to ensure relevance and interest for the target group. Consultative group representatives were emailed concept food character images and asked to provide feedback and suggested changes on the appropriateness of the character images



† Foodbank WA's Healthy Food For All Nutritionists

FIGURE 1 Adapted Rauemi Atawhai Health Education Resource Model³⁴

and names for the intended target group. The feedback was collated and provided to the professional illustrator to make relevant changes to the characters. In several instances, resources were shared for feedback by the consultative group representatives with their colleagues, including Aboriginal Health Workers and practicing teachers.

2.1.4 | Stage 4 draft and test

Representatives from the consultative group with first-hand experience working with the target group were invited to provide feedback and trial the resources during the resource drafting stage. In addition to this formal consultation, teachers and primary school students were asked to pre-test draft characters with feedback during *Food Sensations* nutrition education sessions delivered by Foodbank WA nutritionists. Further, teachers known to the project coordinator were consulted informally via email about the topics and content of the lessons to provide general feedback and suggestions for resource improvement.

To engage with the Aboriginal target group new resources developed included; cartoon food characters in the form of adaptable

clipart, a storybook (Let's Eat) and four cross-curricular lesson plans which included modifiable templates for different language groups⁷ (Figure 2). Lesson plan topics included Seasons, Hunting for Healthy Food, Food Origins (Grains) and Food Origins (Preserved Foods).

An Aboriginal Consultant was contracted to assist with providing cultural advice to ensure resources were appropriate for Aboriginal people. The consultant undertook a co-design role and shared and discussed the resources with their network including conducting a focus group and emailing their networks, which included other Aboriginal Health workers. Suggestions for improvement was provided via email and through face-to-face discussion with the project coordinator, and all feedback was collated to inform further resource refinement. An Aboriginal Artist known to the consultant was commissioned to create an artwork that was used for background images throughout the storybook to strengthen cultural representation.³⁶

2.1.5 | Stage 5 publish and distribute

A small print run of 50 books was produced to enable the storybook resource to be reviewed by relevant stakeholders, which provided

LET'S EAT STORYBOOK



LESSON PLANS



NEW SUPERHERO FOODS CHARACTERS (CLIPART)

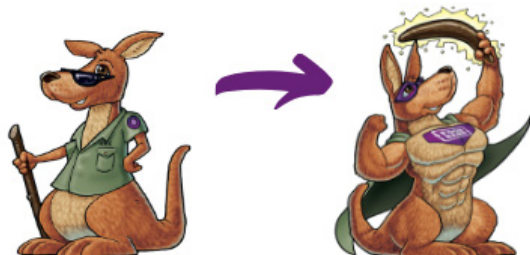


FIGURE 2 Superhero Foods Resources

an opportunity to make changes prior to disseminating to a larger audience. The lesson plans and characters were made available online for free via a dedicated *Superhero Foods* HQ website (www.superherofoodshq.org.au). The resources were promoted to all schools registered for Foodbank WA's *School Breakfast Program* and service delivery partners via Foodbank WA's communication channels.

2.1.6 | Stage 6 evaluate

The aim of the evaluation was to determine how the resources were used by the target group, the appropriateness of the resources for teachers, health professionals and students, and to identify barriers and enablers of implementing the resources in the classroom. Feedback from the evaluation formed part of the consultation process in the development of resources. Formal independent program evaluation was conducted on Foodbank WA's

regional school based programs and although Aboriginal children were included in this process, they were not able to be identified in the evaluation data as a requirement of the overall ethics approvals.⁴²

2.1.7 | Data collection

Two web-based surveys were developed via Survey Monkey (2018) to evaluate the resources. Only respondents who had used or viewed resources were included in the results, with all respondents included in the demographic data. Both surveys were opened at the end of May 2018 and closed at the end of July 2018.

Survey one contained 41 multiple choice questions and free text opportunity to collect information about the useability, barriers and enablers to using the *Superhero Foods* clipart and lesson plans (resources). For example, *Thinking about the new lesson plans, how have you used them?* On average the survey took 20 minutes to complete.

Survey two contained 28 multiple choice questions and provision to comment on the use, success, barriers and enablers to using the storybook. On average, the survey took 13 minutes to complete.

Ethics approval for the project was granted by Edith Cowan University Human Research Ethics Committee (HREC) (ref 20007 2018-2019) with further approval to conduct research with Department of Education (DOE) employees (D18/0176893). DOE specific requirements included passive school Principal consent before teachers could be contacted to participate. The project was carried out over a 12-month period. Resources were uploaded to the *Superhero Foods* HQ website four months prior to collecting evaluation data to provide a lead-time for educators to utilise the resources.

2.1.8 | Recruitment

People working in the intended target setting, including staff and teachers working in early childhood, nutritionists, dietitians and health promotion officers working within communities and schools were invited to complete a survey if they had downloaded the resources. Those health practitioners and educators who had downloaded any of the new resources (clipart or lesson plans) between February 2018 and May 2018 were eligible to be included.

2.2 | Surveys

2.2.1 | Survey 1

A master database was created from website data including name, occupation, school name and email addresses of website users who had downloaded the resources. A total of 99 potential users were identified. Users that were not employed by the DOE were directly emailed a survey invitation during May 2018, which contained an email-specific link directing them to an online survey housed on the Survey Monkey website. When respondents clicked on the survey link, they were directed to the online survey which contained the research information and consent form, with acceptance allowing progress to the survey. Respondents were able to opt out of the survey at any time. All surveys were anonymous. A total of 73 invitation emails were sent to non-DOE individuals (74%).

A two-stepped method of approaching those website users employed by the DOE, which included, but not limited to, teachers, *School Breakfast Program* coordinators, chaplains and education assistants was conducted. Initially DOE employees were identified as working within the DOE system by their email address for example (@education.edu.au) and added to a separate database. The first step of recruitment was seeking permission via email from DOE school principals (N = 27) to contact the DOE teaching staff who were potentially using the resources, in May 2018. A consent process with an opt-out approach (passive consent) was used and allowed 10 days to respond to the invitation to participate and advise if they did not

wish for their school to be involved. After the response deadline had passed, the relevant DOE staff were recruited via email invitation that was sent during June 2018 to a total of N = 26 users (26%) to complete survey one.

2.2.2 | Survey 2

Using the master database, a convenience sample of 25 teachers and school staff, eg *School Breakfast Program* coordinators, teachers and health professionals throughout WA were selected to provide feedback about the storybook for survey two. The methodology to recruit participants employed by DOE was the same process as for the resource survey (Survey 1). With a consent form emailed, their response to participate triggered posting a hard copy of the storybook and they were also emailed an electronic E-book version of the storybook. Two weeks later the participants were emailed a link to the online survey (Survey 2).

2.3 | Data analysis

The analysis for both online surveys was conducted using Survey Monkey (2018). Frequencies and simple comparisons were analysed using Microsoft Excel. All open-ended feedback was collated and interpreted for themes which provided richness to the findings.

3 | RESULTS

Of the 51 participants completing survey one with a response rate of 52% (Table 1), 25 did not provide responses to survey questions focusing on their use/experiences of the resources and were excluded from the analyses as outlined in Table 2. Fourteen respondents (56% response rate) completed survey two and they all reported they had read/used the book with children. Participants were majority female (90%), with 92% non-aboriginal and 51% were from regional and remote WA. The findings represented participants with a range of job titles and other roles included in Table 1. Participants' comments have been interpreted into the following themes: Implementation, Cultural relevance, Satisfaction, Useability, and Health and Curriculum Learning with headings and include examples of participant comments presented in the results where most relevant.

3.1 | Implementation

The majority of respondents in survey one (N = 14) used the clipart and lesson plan resources with primary school aged children (Pre-primary to Year 6) and 42% (N = 5) used the resources with older age groups, in a classroom setting (N = 19) and within rural WA (N = 10). The most used lesson plan was the Hunting for Healthy Food (N = 9) lesson. The clipart was used mostly with the

TABLE 1 Demographics of survey respondents

| Respondents | Survey 1 (N = 51) | Survey 2 (N = 14) |
|---|-------------------|-------------------|
| Male | 4 (8%) | 2 (14%) |
| Female | 47 (92%) | 12 (86%) |
| Identify as Aboriginal or Torres Strait Islander | | |
| ATSI | 4 (8%) | 1 (7%) |
| Not Aboriginal or Torres Strait Islander | 46 (90%) | 13 (93%) |
| Prefer not to disclose | 1 (2%) | 0 |
| Location based on school/organisation post code | | |
| Metro | 29 (57%) | 1 (7%) |
| Regional | 7 (14%) | 13 (93%) |
| Remote | 12 (23%) | 0 |
| Outside of WA | 3 (6%) | 0 |
| New SHF resources | | |
| Participants who had used or viewed new Superhero Resources see Table 2 | 26 (50%) | 14 (100%) |
| Job title | | |
| Aboriginal Islander Education Officer (AIEO) (within a school) | 2 (4%) | 0 |
| Nutrition/Dietetics student | 2 (4%) | 1 (7%) |
| Chaplain | 2 (4%) | 0 |
| School teacher | 15 (25%) | 1 (7%) |
| SBP Coordinator ^a Teacher & SBP Coordinator (N = 4 Survey 1) | 9 (15%) | 0 |
| Nutritionist/dietitian/health promotion officer | 12 (20%) | 5 (36%) |
| Other ^b | 17 (28%) | 7 (50%) |

Note: Survey 2 included, Team Member, Playgroup Leader, Training Project Officer, Community Education Facilitator, Childcare Director, Allied Health Assistant, Clinical Nurse.

^aSome respondents reported multiple job roles including SBP Coordinator at their school – Survey 1.

^bOther job titles Survey 1 included Indigenous Children Family Officer, Food Coordinator, Library Officer, Lead Special Needs Assistant, Volunteer Kitchen Manager, Primary School Education Assistant, Playgroup Facilitator, Long Day Care Centre Director, Tafe Lecturer and Sport Program Manager.

Pre-primary to Year 2 (N = 16) and Year 3 to 6 age groups (N = 14). More than half of the respondents used the clipart to decorate the classroom (N = 12) and to develop their own nutrition education resources (N = 11). With further comments reinforcing food literacy:

"The resources are great and I have utilised them in the support unit when delivering food life skills. The students loved the cards and the graphics. Awesome job". School Teacher #3.

"Congratulations on a great resource, this resource can be of great service to preventative public health messages." Community Education Facilitator #14.

Most respondents used the storybook (Survey 2) with students in Years 1 and 2 (N = 11). More than half of the respondents had

used the storybook with Aboriginal students (N = 8) and three to four-year old's (N = 8). Half of the respondents had used the storybook in the classroom (N = 7). Other settings where the book was implemented included childcare centre/outside of school hours centre (N = 3). More than half of respondents reported using the storybook in a remote/very remote area (N = 8). More than half of the respondents used the book by reading it to their students (N = 9).

Enablers to implementing the storybook were reported by 14 participants and included being appropriate for use in regional and remote areas (N = 10), and key messages were explained in a fun way (N = 9). With comments reinforcing the value in schools and childcare settings:

"Loved the non-city-based imagery, ATSI inclusion and clever use of the hidden items to find". Community Education Facilitator #14.

TABLE 2 Usability of *Superhero Foods* resources by respondents

| The <i>Superhero Foods</i> are ... | | Agree or strongly agree | Neither agree or disagree | N/A | Total N answered question |
|---|-------------------|-------------------------|---------------------------|-------------|---------------------------|
| Relevant to the students I educate | Resources (Qu 29) | 100% (N = 26) | | | 26 |
| | Storybook (Qu 17) | 71% (N = 10) | 14% (N = 2) | 14% (N = 2) | 14 |
| Age appropriate | Clipart (Qu 21) | 95% (N = 21) | | 4% (N = 1) | 22 |
| | Storybook (Qu 13) | 86% (N = 12) | 14% (N = 2) | | 14 |
| Appropriate for students in regional and remote areas | Clipart (Qu 21) | 73% (N = 16) | 27% (N = 6) | | 22 |
| | Storybook (Qu 13) | 100% (N = 14) | | | 14 |
| Engaging for students | Clipart (Qu 21) | 95% (N = 21) | | 4% (N = 1) | 22 |
| | Storybook (Qu 12) | 100% (N = 14) | | | 14 |
| Enjoyable for students | Clipart (Qu 21) | 91% (N = 20) | 9% (N = 2) | | 22 |
| | Storybook (Qu 12) | 100% (N = 14) | | | 14 |
| Effective, students achieve health learning outcomes | Clipart (Qu 21) | 100% (N = 22) | | | 22 |
| | Resources (Qu 28) | 96% (N = 25) | | 4% (N = 1) | 26 |
| | Storybook (Qu 13) | 100% (N = 14) | | | 14 |
| Culturally appropriate | Clipart (Qu 21) | 95% (N = 21) | 4% (N = 1) | | 22 |
| | Resources (Qu 28) | 92% (N = 24) | 8% (N = 2) | | 26 |
| | Storybook (Qu13) | 100% (N = 14) | | | 14 |
| Supports the curriculum framework | Resources (Qu 28) | 62% (N = 16) | 11% (N = 3) | 27% (N = 7) | 26 |
| | Storybook (Qu 17) | 57% (N = 8) | 7% (N = 1) | 36% (N = 5) | 13 |
| Practical for use in the classroom | Resources (Qu 28) | 88% (N = 23) | | 3% (N = 1) | 26 |
| | Storybook (Qu 17) | 78% (N = 11) | | 12% (N = 3) | 14 |
| Practical for use in other activities | Resources (Qu 28) | 96% (N = 25) | | 4% (N = 1) | 26 |
| | Storybook (Qu 17) | 86% (N = 12) | 14% (N = 2) | | 14 |

Note: ^cRespondents who used the new *Superhero Foods* Resources are represented in this table.

"The book is a great resource to value-add to the work we already do with childcare centres and Kindy/Pre-primary students" Nutritionist/Dietitian/Health Promotion Officer #11.

The majority of respondents (N = 20) reported they did not experience any barriers to the implementation of the resources. The few respondents that did report barriers described barriers to implementing resources including; nutrition was not a priority for their school/community (N = 1), difficulty in accessing resources (N = 1) and a limited range of nutrition education messages (N = 1).

3.2 | Cultural relevance

Data indicated that the vast majority of respondents agreed or strongly agreed the clipart 95% (N = 21), resources 92% (N = 24) and storybook 100% (N = 14) were culturally appropriate. All (100%) respondents reported the storybook and clipart 73% (N = 16) respectively, was appropriate for students in regional and remote areas. There was a small number (N = 6) of respondents that provided a neutral response neither agreeing or disagreeing the resources were appropriate for students in regional and remote areas. This may have

resulted as a 'not applicable' response was not available. Further clarification found these respondents reported metropolitan post codes. Table 2 provides a summary of key findings on useability of the resources.

Respondents highlighted the Aboriginal reconciliation and cultural value:

"We are very excited to have found the resources as we are just beginning our reconciliation journey and the vibrant easy to read activity sheets will provide many hours of learning for the children and Educators alike". Long Daycare Centre Director #29.

"Book [is] most effective in Remote Indigenous school as they [can] relate to the animals and hunting". School Teacher #6.

3.3 | Satisfaction

Data from survey one indicated that participants who had used resources with their students reported a high level of satisfaction with the vast majority 92% (N = 24) agreeing they perceived their

students liked the resources. The most reported enablers for the clipart and lesson plan resources were, they were highly engaging (N = 22), followed by adaptable (N = 21) and free/low cost (N = 21). Respondents reported a high level of satisfaction (Survey 2) with the storybook among their students with all (100%) respondents agreeing they perceived their students liked the storybook (N = 14).

Respondents reinforced the educational appeal suggesting:

"The book is very vibrant and colourful, attractive to the students". School Teacher #6.

"My students love the packs of cards. They beg to play Memory/Snap etc with them. I love that they teach nutrition, but also teamwork, taking turns, old-fashioned entertainment, "unplugged" play. Thank you so much. Your resources are just brilliant. School Teacher #32.

"These resources have been a pleasure to use as the students are excited by them. Zombie food is the new lingo at my school". School Teacher/SBP Coordinator #17.

3.4 | Health and curriculum learning

Most respondents 62% (N = 16) reported the resources and storybook 57% (N = 8) supported the curriculum framework and were practical for use in the classroom. Respondents reported the clipart 84% (N = 22), resources 96% (N = 25) and storybook 100% (N = 14) were effective in helping students achieve health learning outcomes.

Respondent further suggested:

"I have not only run the Hunting for Healthy Food lesson with my split 1/2 class, but have printed and laminated the rainbow snake resource which we used for the healthy food scramble (with groups searching for their colour of the rainbow snake). I have also drawn an A2 size "trash can" to stick all of the Zombie Foods to. The rainbow snake lines one of our classroom walls and says "Eat like a rainbow snake - not like a Zombie". School Teacher #32.

Respondent reinforced the cross-curricular application:

"The year 2s were required to write a persuasive text for an English assessment about healthy canteen food and almost ALL of them wrote about eating like a rainbow snake! The lesson is great, the resources are great, and the cultural significance of the rainbow snake brings awareness of Aboriginal history, but also a character that is easy for young children to remember when choosing healthy food options". School Teacher #32.

3.5 | Stage 7. Resource learnings and translation

The learnings from the development phase, were translated into a clear infographic/communication to support the dissemination of the lesson plans, storybook and character clip art. Resources were promoted via social media channels including Facebook and Instagram, promoted through Foodbank's Morning Toast Newsletter and via direct electronic mailout to registered users of the *Superhero Foods* HQ website. Although heavily promoted via social media to Foodbank's existing networks interestingly, one third of website traffic (33%) comes from organic searches through Google or Bing. The popularity of the resources is reflected in the rapid growth of the *Superhero Foods* HQ since its launch in 2016. At the end of 2020, there were a total of 5,721 users registered and 61,671 items downloaded or ordered through the site. Within a 12-month period (1 July 2018 to 30 June 2019), a total of 721 lesson plans were downloaded from the suite of lesson plans available on website, 60.89% (N = 439) of those downloads included the four new lessons developed under this project. This demonstrates a demand for these resources by educators which equate to 40% of total website users. In general, the success of the *Superhero Foods* resources has continued since the new Aboriginal resources have been uploaded, with the number of registered website users increasing two-fold, which reflects the interest in food literacy resources for school aged children.

4 | DISCUSSION

The development and dissemination of the new Aboriginal *Superhero Foods* resources and storybook has potentially broadened and expanded the opportunities for students to access resources that build their food literacy skills as evidenced by the ongoing demand and download of these resources.

This project strived to build culturally responsive education resources using co-design principles, including actively engaging and listening to Aboriginal people,³⁶ with input from a regional consultative group, Aboriginal artist, Aboriginal consultant and their network. This project demonstrates the process which may guide other practitioners when planning the development of culturally specific Aboriginal resources.

Evaluation conducted in schools specific to regional and remote areas in 2020 further supports the appropriateness of the *Superhero Foods* resources and described how students connected strongly with the concepts.^{43,44} The evaluation found the *Superhero Foods* resources created significant engagement of children. Children related to the healthy images as everyday foods and related to them as 'exciting' foods. Research indicated a significant increase in knowledge by children pre to post *Food Sensations* program where *Superhero Foods* resources increased understanding of the 'Everyday Foods' providing strong mind and healthy body and 'Zombie' foods were understood to contribute to high sugar, fat and salt in their diet. Further students' knowledge of healthy food options was significantly increased when engaged in education sessions using *Superhero Food* resources.^{43,44}

Our findings demonstrated participant satisfaction with the application of the resources where they were seen as fun and provided relevant

health messaging. Resources were adaptable to use in a range of learning settings, included cross-curricular Aboriginal culture and history content, and equitable for students with special support needs. Importantly, they were used to engage with school cultural activities relating to the needs of Aboriginal and non-Aboriginal children including reconciliation events. The character clipart enabled teachers to create their own resources incorporating food characters, which allowed students to 'unplug' and play with old fashioned educational games. Lesson plans linked to the curriculum were relevant to remote food hunting and gathering⁴⁵ and Aboriginal seasons templates were adaptable for different languages groups. The Let's Eat story book provided non-metropolitan centric imagery, adapted for regional and remote Aboriginal children. Key enablers to the success of the resource included access to bespoke, downloadable and highly engaging resources. Few barriers were reported except when nutrition wasn't always a school priority. This deterrent to use is counter to the focus on nutrition and healthy eating in the Australian Curriculum³¹ and for WA Aboriginal health.³³

A rigorous staged approach to resource development was undertaken to produce resources that have shown to be highly valued. The New Zealand Rauemi Atawhal Model provided guidance for the development of materials including a focus on cultural audiences with a useful plain language checklist.³⁴ The adapted model guided the development of resources which provided a methodical approach that could be replicated for future resource development. The strong community orientated partnerships Foodbank WA has established with other health organisations and in-depth consultation with educators and participants represented by a broad range of relevant roles working with the target group, resulted in relevant, engaging and culturally appropriate resources for Aboriginal children. Credible consultation with experienced Aboriginal experts from the community has been important in the resource development process.⁴⁵

This project aimed to be culturally engaging for health educators and Aboriginal children who can be disadvantaged living in rural and remote communities. These resources support the important environmental conditions that engage Aboriginal audiences in health literacy at a population level.⁴⁶ This included lesson plan templates for Aboriginal seasons to enable remote schools to personalise for their own languages relevant to location and equity of access through free online resources. Further, the project developed resources for Aboriginal children that are socially and culturally inclusive, such as utilising traditional bush foods that can be protective of chronic diseases later in life.⁴⁷

Reflecting Aboriginal identity and culture within a classroom setting provides learning opportunities for all students. This project has shown how incorporating Aboriginal culture, imagery and bush foods can support the cross-curricular learning priorities for educators. This was further supported by a participant who used the resources to align with their school's reconciliation journey elevating cultural awareness opportunities with all students.³² While research⁴⁸ indicates health literacy is important to individual endeavour, such as with marginalised populations, it will be critical to further support food security determinants for regional and remote children, where health literacy policies and processes can enhance access to a healthy food environment.^{46,49}

Food literacy resources that target children need to be appealing, fun and engaging. A success factor of the *Superhero Foods* resources and storybook was the significant appeal to children. Colourful and vibrant cartoon style characters and visuals engaged children but also translated key health messages. The inclusion of discretionary food characters reinforced the poor choices of these foods which Colles^{7 p89} refers to in Aboriginal language as "Debil Debil"; foods which can make children sick. Schools can further integrate the resources using local Aboriginal arts and identification of traditional foods to strengthen the relevance to community. The use of cartoon food characters to engage children in discussion and learning about food choices is pivotal to the *Superhero Foods* concept. The characters not only set out to portray healthy foods recommended by the Aboriginal Guide to Healthy Eating,^{45,50} for example kangaroo and goanna, but also include discretionary foods, which are child-focused and fun rather than seen as just 'health focused'.⁵

A positive outcome of this project has been the number of people outside of the intended target group, such as childcare centres and education support units that have used the resources. The simple health messaging with engaging visuals played a role in being appealing to these groups. Lastly, this project has demonstrated regardless of Aboriginality, the *Superhero Foods* resources have provided learning opportunities for all students to enhance knowledge about Aboriginal culture and bush foods and strengthen equitable access to familiar foods for regional and remote communities.

4.1 | Strengths and limitations

The resource development process has allowed engagement with experts including teachers and health professionals working with the target audience however, there was a limitation with the time-frame available to participants to use new resources in the classroom before evaluation, limiting the feedback of these participants. Genuine Aboriginal engagement in research and resource development is underpinned by historical barriers that continue to challenge the well-meaning intentions of educators and practitioners across a multitude of fields.⁵¹ Further, the majority of formal survey responses were from non-Aboriginal participants which may have biased results. Aboriginal input to inform resource development was included from representatives within the consultative group and their colleagues which included Aboriginal Health Workers. The study did not have ethics approval to further evaluate the new resources with children. However, the resource development process engaged with Aboriginal experts and those health and education providers, from regional and remote areas of WA, who will use the resources with Aboriginal children.

5 | CONCLUSION

Superhero Foods resources are a positive inclusion of food literacy resources for Aboriginal and non-Aboriginal children. The

development of the resources utilising a staged consultative planning process has been beneficial in improving the efficacy of resources for the intended target group. The highly engaging nature of the resources with appropriate simple visuals will be adaptable for interpretation by Aboriginal language groups. Visual representation using familiar Aboriginal foods and concepts ensure healthy choices are fundamental to reinforcing nutritional messaging.

ETHICS APPROVAL STATEMENT

Approval to conduct research on Department of Education sites was granted on 9 May, 2019 (D18/0176893) and ethics approval for the project was granted the Edith Cowan University (ECU) Human Research Ethics Committee (HREC) from 24 April, 2018 to 1 February, 2019 (ref 20 007).

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CONFLICT OF INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the project, in the collection of data, writing of the manuscript or in the decision to publish the results.

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REFERENCES

- Foodbank Western Australia 25 Years of fighting hunger in Western Australia. Annual report 2020; 2020. [cited 2021 Oct 5]. Available from: https://www.foodbank.org.au/wp-content/uploads/2019/07/AR2020-Final_online.pdf?state=wa
- Australian Bureau of Statistics Regional Summary Western Australia [Internet]; 2018. [cited 2020 Feb 14]. Available from: https://itt.abs.gov.au/itt/r.jsp?RegionSummary@ion=5&dataset=ABS_REGIONAL_ASGS2016&geoconcept=ASGS_2016&datasetASGS=ABS_REGIONAL_ASGS2016&datasetLGA=ABS_REGIONAL_LGA2018@ionLGA=LGA_2018@ionASGS=ASGS_2016
- Butcher LM, Chester MR, Aberle LM, Bobongie VJA, Davies C, Godrich SL, et al. Foodbank of Western Australia's healthy food for all. *Br Food J*. 2014;116(9):1490–505. <https://doi.org/10.1108/BFJ-01-2014-0041>
- National Health and Medical Research Council. Australian dietary guidelines. Canberra, ACT: National Health and Medical Research Council; 2013. [cited 2019 Jun 1]. Available from: <https://www.health.gov.au/sites/default/files/australian-dietary-guidelines.pdf>
- Byrne M, Hill S, Wenden E, Devine A, Miller M, Quinlan H, et al. Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program FINAL REPORT. Edith Cowan University Telethon Kids Institute; 2018. [cited 2020 Oct 31]. Available from: <https://www.foodbank.org.au/wp-content/uploads/2020/09/FBWA-2017-SBP-Evaluation-Report.pdf?state=wa>
- Australian Curriculum Assessment and Reporting Authority ACARA My School Fact Sheet. Guide to understanding ICSEA (Index of community social educational advantage) values. [Internet]; 2015. Available from: https://docs.acara.edu.au/resources/Guide_to_understanding_ICSEA_values.pdf
- Colles S. Food and Health communication across cultures: considerations for Health Professionals Working with Remote Aboriginal Communities. Menzies School of Health Research; 2014. [cited 2020 Sept 23]. Available from: https://www.menzies.edu.au/page/Research/Projects/Nutrition/Food_and_health_communication_across_cultures/
- Byrne M, Hill S, Devine A, Wenden E, Miller M, Cross D. Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program; Statewide Year 2 Progress Report. Edith Cowan University Telethon Kids Institute; 2017. [cited 2021 Aug 11].
- Hill S, Byrne M, Devine A, Miller M, Cross D. Evaluation of Foodbank WA's School Breakfast Program and Nutrition Education Program: Annual Progress Report 2015. Edith Cowan University Telethon Kids Institute; 2016. Available from: <https://www.foodbank.org.au/WA/researchwa/?state=wa>
- Truman E, Elliott C. Health-promoting skills for children: evaluating the influence of a media literacy and food marketing intervention. *Health Educ J*. 2019;79(4):431–45. <https://doi.org/10.1177/0017896919889647>
- Vidgen HA, Gallegos D. Defining food literacy and its components. *Appetite*. 2014;76:50–9. <https://doi.org/10.1016/j.appet.2014.01.010>
- National Health and Medical Research Council Australian Dietary Guidelines; 2013. [cited 2019 Jun 1]. Available from: <https://www.eatforhealth.gov.au/guidelines>
- Whalan S, Farnbach S, Volk L, Gwynn J, Lock M, Trieu K, et al. What do we know about the diets of Aboriginal and Torres Strait Islander peoples in Australia? A systematic literature review. *Aust NZ J Public Health*. 2017;41(6):579–84. <https://doi.org/10.1111/1753-6405.12721>
- Butten K, Johnson NW, Hall KK, Anderson J, Toombs M, King N, et al. Risk factors for oral health in young, urban, Aboriginal and Torres Strait Islander children. *Aust Dent J*. 2019;64:72–81. <https://doi.org/10.1111/adj.12662>
- Pollard C. Selecting interventions for food security in remote indigenous communities. In: *Food security in Australia*. Boston, MA: Springer US; 2013. p. 97–112.
- Food and Agriculture Organization of United Nations FSP. An Introduction to the Basic Concepts of Food Security Food Security Information for Action; 2008. Report No.: 9780199245604.
- Lee A, Ride K. Review of nutrition among Aboriginal and Torres Strait Islander people. *Aust Indigenous Health Bull*. 2018;18(4):1–38.
- Hardy LL, O'Hara BJ, Hector D, Engelen L, Eades SJ. Temporal trends in weight and current weight-related behaviour of Australian aboriginal school-aged children. *Med J Aust*. 2014;200:667–71. <https://doi.org/10.5694/mja13.10614>
- Jamieson LM, Armfield JM, Roberts-Thomson KF. Oral health of Aboriginal and Torres Strait Islander children. AIHW cat. no. DEN 167. Canberra: Australian Institute of Health and Welfare (Dental Statistics and Research Series No. 35). [cited 2021 Sept 2]. Available from: <https://www.aihw.gov.au/getmedia/65f1b8fa-9f64-48ad-87f7-c15247c7bb0a/ohoatsic.pdf.aspx?inline=true>
- Australian Institute of Health and Welfare. Australia's health. Canberra: AIHW; 2016. [cited 2019 Sept 14]. Available from: <https://www.aihw.gov.au/getmedia/405d9955-c170-4c39-a496-3839059149f7/ah16-5-1-health-across-socioeconomic-groups.pdf.aspx>
- Harrison MS, Coyne T, Lee AJ, Leonard D, Lawson S, Groos A, et al. The increasing cost of the basic foods required to promote health in

- Queensland. *Med J Aust.* 2007;186:9–14. <https://doi.org/10.5694/j.1326-5377.2007.tb00778.x>
22. Pollard CM, Landrigan TJ, Ellies PL, Kerr DA, Lester ML, Goodchild SE. Geographic factors as determinants of food security: a Western Australian food pricing and quality study. *Asia Pac J Clin Nutr.* 2014; 23:703–13. <https://doi.org/10.6133/apjcn.2014.23.4.12>
 23. Scelza BA, Bird DW, Bird RB. Bush tucker, shop tucker: production, consumption, and diet at an Aboriginal outstation. *Ecol Food Nutr.* 2014;53(1):98–117. <https://doi.org/10.1080/03670244.2013.772513>
 24. Brimblecombe J, Maypilama E, Colles S, Scarlett M, Dhurrkay JG, Ritchie J, et al. Factors influencing food choice in an Australian Aboriginal community. *Qual Health Res.* 2014;24:387–400. <https://doi.org/10.1177/1049732314521901>
 25. Charlton KE. Food security, food systems and food sovereignty in the 21st century: A new paradigm required to meet Sustainable Development Goals. *Nutrition & Dietetics.* 2016;73(1):3–12. <https://doi.org/10.1111/1747-0080.12264>
 26. Crowe R, Stanley R, Probst Y, McMahon A. Culture and healthy lifestyles: a qualitative exploration of the role of food and physical activity in three urban Australian Indigenous communities. *Aust NZ J Public Health.* 2017;41(4):411–6. <https://doi.org/10.1111/1753-6405.12623>
 27. Browne J, Adams K, Atkinson P, Gleeson D, Hayes R. Food and nutrition programs for aboriginal and Torres Strait Islander Australians: an overview of systematic reviews. *Aust Health Rev.* 2018;42(6):689. <https://doi.org/10.1071/AH17082>
 28. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int.* 2000;15(3):259. <https://doi.org/10.1093/heapro/15.3.259>
 29. Kelly RK, Nash R. Food literacy interventions in elementary schools: a systematic scoping review. *J Sch Health.* 2021;91(8):660–9. <https://doi.org/10.1111/josh.13053>
 30. Nash R, Patterson K, Flittner A, Elmer S, Osborne R. School-based health literacy programs for children (2–16 years): an international review. *J Sch Health.* 2021;91(8):632–49. <https://doi.org/10.1111/josh.13054>
 31. Australian Curriculum Assessment and Reporting Authority (ACARA). The shape of the Australian curriculum. Health and Physical Education; 2012. [cited 2022 Jan 13]. Available from: http://docs.acara.edu.au/resources/Shape_of_the_Australian_Curriculum_Health_and_Physical_Education.pdf
 32. Department of Education. Western Australia Aboriginal Cultural Standards Framework. 2015.
 33. Department of Health. WA Aboriginal Health and Wellbeing Framework 2015–2030; 2015.
 34. New Zealand Ministry of Health. Rauemi Atawhai – A guide to developing health education resources in New Zealand [Report]; 2012 Report No.: 978-0-478-39315-6 (print), 978-0-478-393916-3 (online). [cited 2020 March 4]. Available from: <https://www.health.govt.nz/publication/rauemi-atawhai-guide-developing-health-education-resources-new-zealand>
 35. Lewthwaite BE, Osborne B, Lloyd N, Boon H, Llewellyn L, Webber T, et al. Seeking a pedagogy of difference: what aboriginal students and their parents in North Queensland say about teaching and their learning. *Australian J Teacher Educ.* 2015;40:132–59. <https://doi.org/10.14221/ajte.2015v40n5.8>
 36. Narragunnawali Reconciliation in Education Evaluating Resources Guide. Health and Physical Education; 2022. [cited 2022 Jan 21]. Available from: <https://www.narragunnawali.org.au/storage/media/page/301a792b153a6211e0b9eb329b8060fe.pdf>
 37. Murphy ST, Frank LB, Chatterjee JS, Moran MB, Na Z. Comparing the relative efficacy of narrative vs nonnarrative health messages in reducing health disparities using a randomized trial. *Am J Public Health.* 2015;105(10):2117–23. <https://doi.org/10.2105/AJPH.2014.302332>
 38. McQueen A, Kreuter MW, Kalesan B, Alcaraz KI. Understanding narrative effects: the impact of breast cancer survivor stories on message processing, attitudes, and beliefs among African American women. *Health Psychol.* 2011;30(6):674–82. <https://doi.org/10.1037/a0025395>
 39. Peralta LR, Dudley DA, Cotton WG. Teaching healthy eating to elementary school students: a scoping review of nutrition education resources. *J Sc Health.* 2016;86(5):334–45. <https://doi.org/10.1111/josh.12382>
 40. School Curriculum and Standards Authority. Government of Western Australia. K-10 Outline. Teaching. Aboriginal Languages [Internet]; 2014. [cited 2022 Jan 13]. Available from: <https://k10outline.scsa.wa.edu.au/home/p-10-curriculum/codes/aboriginal-languages/language-revival/3-6/acifwc155>
 41. Hayward B, Sinclair S, Martin-Babin M, Villa L, Madell D. Creating health literate consumer resources: insights from a professional development program. *Health Lit Res Pract.* 2020;4(3):e185–e189. <https://doi.org/10.3928/24748307-20200806-01>
 42. Godrich SL, Aberle LM, Blake VE, Platts JR, Le NN, Thorne LM, et al. Foodbank WA Pilbara Internal Evaluation Report (2018) School Breakfast Program, Food Sensations in Schools, Fuel your Future, Food Sensations for Parents and Educator Training Perth. Western Australia: Foodbank WA; 2018. Available from: https://www.foodbank.org.au/wp-content/uploads/2021/10/WA-Pilbara_Evaluation-2018.pdf?state=wa
 43. Foodbank of Western Australia Foodbank WA Pilbara Internal Evaluation Report 2020_FINAL.pdf>; 2020. Available from: https://www.foodbank.org.au/wp-content/uploads/2020/07/WA-Foodbank_Pilbara_Evaluation_2019-SEO.pdf?state=wa
 44. Kantar Public. Foodbank WA Pilbara Program evaluation 2020 final report. 2020.
 45. Colles SL, Maypilama E, Brimblecombe J. Food, food choice and nutrition promotion in a remote Australian Aboriginal community. *Aust J Prim Health.* 2014;20(4):365–72. <https://doi.org/10.1071/PY14033>
 46. Smith JA, Ireland S. Towards equity and health literacy. *Health Promot J Austr.* 2020;31(1):3–4. <https://doi.org/10.1002/hpja.317>
 47. Ferguson M, Brown C, Georga C, Miles E, Wilson A, Brimblecombe J. Traditional food availability and consumption in remote Aboriginal communities in the Northern Territory, Australia. *Aust NZ J Public Health.* 2017;41(3):294–8. <https://doi.org/10.1111/1753-6405.12664>
 48. Kolarcik P, Belak A, Osborne R. The Opehlia (Optimise Health Literacy and Access) process: using health literacy alongside grounded and participatory approaches to develop interventions in partnership with marginalised populations. *European Health Psych.* 2015;17(6):297–304.
 49. Godrich SL, Lo J, Davies CR, Darby J, Devine A. Which food security determinants predict adequate vegetable consumption among rural Western Australian children? *Int J Environ Res Public Health.* 2017;14:40. [cited 2020 March 13] <https://doi.org/10.3390/ijerph14010040>
 50. National Health & Medical Research Council, Department of Health. Aboriginal and Torres Strait Islander Guide to Healthy Eating; 2015.
 51. Hunt J. Engaging with Indigenous Australia—exploring the conditions for effective relationships with Aboriginal and Torres Strait Islander communities. Issues paper no. 5. Canberra, Australia: Australian Institute of Health and Welfare & Melbourne: Australian Institute of Family Studies; 2013. Available from: <https://www.aihw.gov.au/getmedia/7d54eac8-4c95-4de1-91bb-0d6b1cf348e2/ctgc-ip05.pdf.aspx?inline=true>

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