



Bush Tucker, Safe Sun Exposure, and Vitamin D

Community Update Report 2022

What is vitamin D?

We can consume vitamin D through the foods we eat, and our body can produce vitamin D via safe sun exposure. Aboriginal people are more likely to have lower vitamin D levels than the wider Australian population. Low vitamin D levels can cause poor bone health and may contribute to: respiratory infections, non-infectious skin disease, chronic kidney disease, type-two diabetes, poor mental health and low birth weight for babies.

Working with Elders and Community to investigate the vitamin D content of bush tucker

Aboriginal people have lived in Australia for tens of thousands of years and retain a deep understanding of and connection to Country. Part of living on Country is knowing which foods are good to eat, and which seasons those foods should be eaten in. In this project, we are being led by respected local Elders to help us determine the kinds of foods ancestors ate in the past, and the foods that Aboriginal people still eat today. By partnering with local Aboriginal people and organisations we will collect samples of bush tucker and measure their vitamin D content. This project is being conducted on Noongar Boodja/ Country in Perth, and Bardi Jawi Country in the Kimberley.

We are working closely with the Aboriginal communities in Perth and the Kimberley. We will hold yarning circles with community members to talk about their knowledge of bush tucker and sun safety practices with the goal of developing public health messaging to increase vitamin D intake in Aboriginal populations.

The Perth part of the project is led by Elder Researchers Aunty Dale Tilbrook and Dr Noel Nannup. Governance structures for the Kimberley are currently being developed. Elders and Community are supported by a team of researchers.

Project aims:

1. Identify traditional and current knowledge and attitudes about diet and sun exposure;
2. Collect samples of bush tucker and measure vitamin D content;
3. Determine optimal dietary strategies for increasing vitamin D intakes among Aboriginal people; and,
4. Work with the community and others to disseminate findings on diet and safe sun exposure to prevent vitamin D deficiency .



Elder Researchers Aunty Dale Tilbrook and Dr Noel Nannup



Project team members on a cultural tour of Bardi Jawi Country

Project Activities - Noongar/Perth Site

Since 2021 the research team has been working closely with Elder Researchers and Chief Investigators Aunty Dale Tilbrook and Dr Noel Nannup to understand the seasonal availability of bush tucker on Noongar Boodja.

As part of the work with Aunty Dale and Uncle Noel we have developed a list of plants and animals that form an important part of the diets of Noongar people. We have partnered with Noongar people to start collecting plant and animal samples when they are in season. These samples are collected, cleaned, and prepared, then frozen. The frozen samples are sent to the National Measurement Institute in Melbourne for analysis. This analysis will indicate how much vitamin D can be found in each food.

Next Steps for Noongar/Perth Site

Yarning Circles: we are getting ready to hold yarning circles with community members who are interested in bush tucker. We would like to talk to people about the kinds of bush tucker they and their family eat, how they catch and prepare the food and the times of the year that they eat certain foods. In the yarning circles we will also talk about safe sun exposure. The information from these yarning circles will be recorded and used in co-design processes.

Co-Design: after the yarning circles we will work with Community to understand and interpret the knowledge in culturally safe ways. We will then work with Elders and Community to co-design resources for Aboriginal people that promote diets high in vitamin D, provide information about the vitamin D content of traditional foods, and provide safe sun exposure messaging specific to Aboriginal people.



Elder Researcher and Chief Investigator Aunty Dale Tilbrook on Whadjuk Boodja with Curtin University researchers – Ellie Dunlop, Lucinda Black, and Andrea Begley



Elder Researcher and Chief Investigator Aunty Dale Tilbrook with Blood Root that she gathered on Whadjuk Boodja

Project Activities - Kimberley Site



Members of the project team meeting with WAAP at Ardyaloon

The team from Telethon Kids Kimberley has helped us to connect with people and communities on the Dampier Peninsular. Lombadina, Ardyaloon, and Djarindjin were identified as communities that were willing to be involved in the project.

The research team has held meetings with the KLC, PBC, and Bardi Jawi Rangers to get to know each other and to discuss the project. These meetings are the start of the co-design process and allow the communities to tell the research team how they would like to be involved in the research.

In October 2021, members of the research team travelled to the Peninsular to meet with key stakeholders to continue building connections and relationships. The team took part in an on-Country Cultural Tour and were introduced to the abundant bush tucker available.

In July 2022 John Jacky and Janine McNamara joined the research team and are based in the Kimberley. John and Janine will continue to work with the community and the research team as the project progresses.

Next Steps for the Kimberley Site

Governance: the next key step for the Kimberley is to establish robust community governance processes to underpin the co-design of ongoing project activities. The governance group will lead the project and provide cultural knowledge and wisdom.

Co-Design: John and Janine will meet with interested members of the community to co-design how they would like to be involved with the project.

Yarning circles: we will yarn with community about the kinds of bush tucker that are regularly eaten. We want to know how the food is caught and prepared and the season that the food is usually eaten in. We will talk to people about the most important foods for us to collect and analyse for vitamin D content. During these yarning circles we will also talk to people about safe sun exposure. The information from these yarning circles will be recorded and used to help co-design public health messaging to promote bush tucker that is high in vitamin D, and safe sun exposure for Aboriginal people.

Sampling plan: after the yarning circles we will work with community to co-design a sampling plan that outlines the most important plant and animal samples to collect for measurement of vitamin D.

Sample collection: we will partner with local providers to collect, prepare, and store the plant and animal samples. Samples will be frozen, then transported to Melbourne for vitamin D analysis at the National Measurement Institute.



The team enjoyed a cultural tour of Bardi Jawi Country focused on bush tucker



Fresh seafood lunch on Bardi Jawi Country

The project logo was painted by respected Noongar Elder and artist Aunty Millie Penny.

The logo depicts a coolamon, a women's tool for gathering food. The coolamon was used to carry the berries, leaves, and seeds collected by women and was used to grind seeds to make flour for damper.

The logo also depicts other bush tucker eaten in traditional diets including turtle, emu eggs, and bardi. The logo represents a traditional, healthy diet for Aboriginal people and is tied to the project aim of encouraging Aboriginal people to include more traditional food sources in their diets.



Meet Chief Investigator Associate Professor Lucinda Black

Associate Professor Lucinda (Cindy) Black has been researching nutrition and vitamin D for more than 15 years. She began her research career in Ireland, where

vitamin D deficiency is common because of the rainy weather. When Cindy moved to Perth ten years ago, she discovered that vitamin D deficiency is common even in sunny countries like Australia. She has since been awarded two major project grants from the National Health and Medical Research Council to help address the high prevalence of vitamin D deficiency in the general Australian and Aboriginal populations. She has published more than 60 research articles and has been awarded more than \$6 million as lead investigator for her research. She hopes that by understanding dietary vitamin D in Australia, and promoting healthy food choices and safe sun exposure, we will together tackle the public health issue of vitamin D deficiency.

John and Janine

are a husband and wife team. Janine is originally from Melbourne and John is of Bardi Baniol descent, born and raised in the Kimberley by his Bardi Grandparents. Janine and John share 4 children and 12 Grandchildren. They look forward to working with community and Telethon researchers on this very important Vitamin D project.

Contact Information - PERTH



For more information about the **Noongar/Perth** part of the project please contact

Carol Michie

T | 0417 996 540

E | carol.michie@telethonkids.org.au

Contact Information - KIMBERLEY



For more information about the **Kimberley** part of the project please contact

Janine McNamara

T | 0405109896

E | janine.mcnamara@telethonkids.org.au

John Jacky

T | 0477320444

E | john.jacky@telethonkids.org.au