

Acknowledge  
The Elders past and  
present who are the  
traditional custodians of  
Alice Springs,  
the land we are on today,  
for allowing us to come  
together to learn from  
each other



*Bush Tucker  
in Kidney Failure and Diabetes*

Lesley Salem Nephrology Nurse Practitioner and Elizabeth  
Thompson Research Assistant

# Today's talk

- ② Renal disease
- ② Diet and chronic disease
- ② Bush tucker diet
- ② Recognising the link with diet to better health
- ② The book

# Today's objective

To demonstrate that resources can make the consumption of bush tucker a reality for those people with chronic kidney disease and diabetes

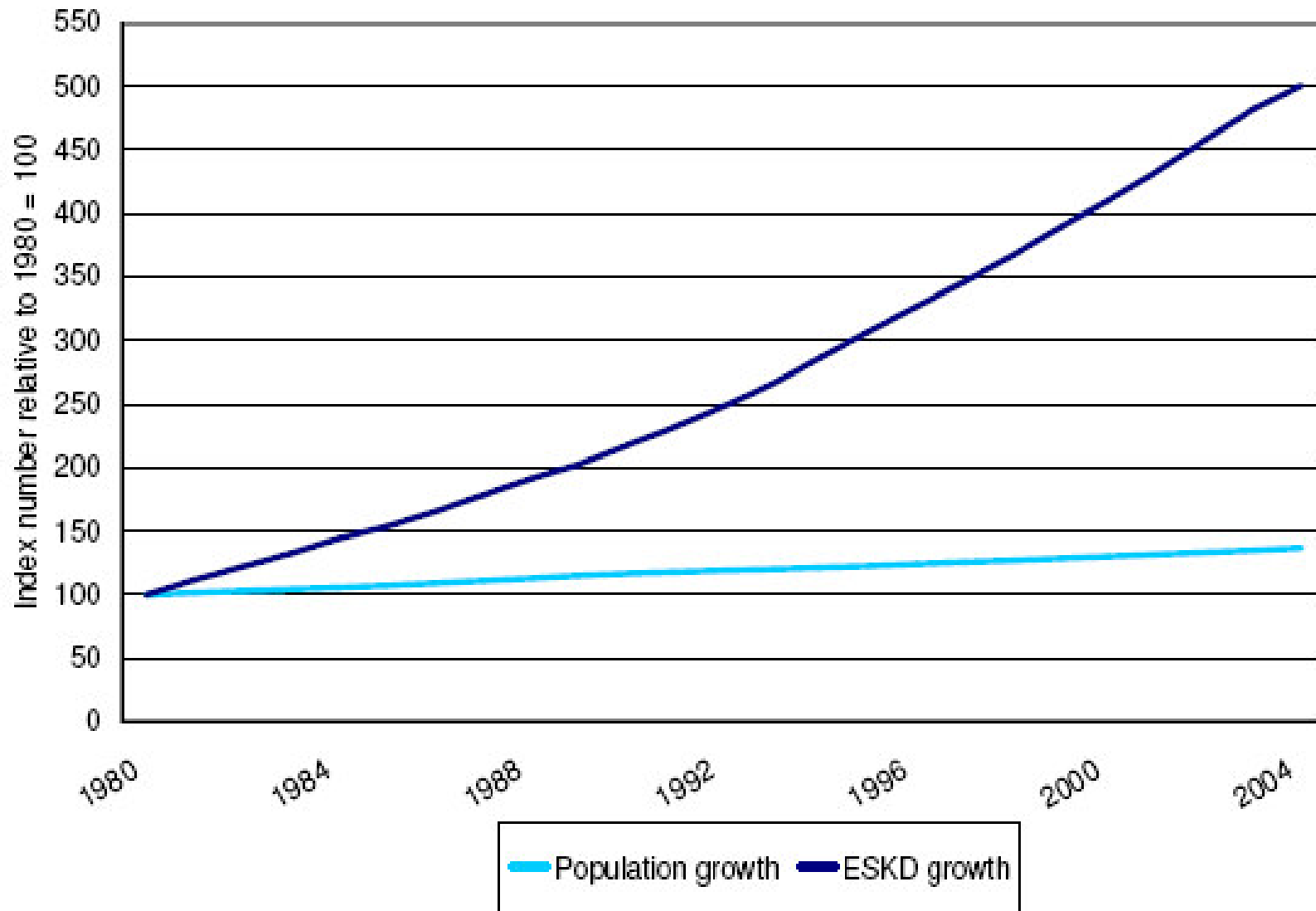
## As a result

- ② Understanding that diet is an essential component of management of renovascular disease as well as psychological comfort
- ② More resources are needed that enable greater freedom in options for Aboriginal people to be self determining in their management of their chronic disease

# Renal Disease



## Growth in total demand for RRT services from 1980 to 2004



Over the last 25 years, while the Australian population has grown less than 40%, the number of Australians being treated with dialysis or a kidney transplant has grown more than 400%.

## 5.4 Modality utilisation

Figure 33: Treatment modality utilisation by Indigenous and non-Indigenous RRT patients in Australia, at 31 December 2004 (Source: ANZDATA, special data request, 2005)

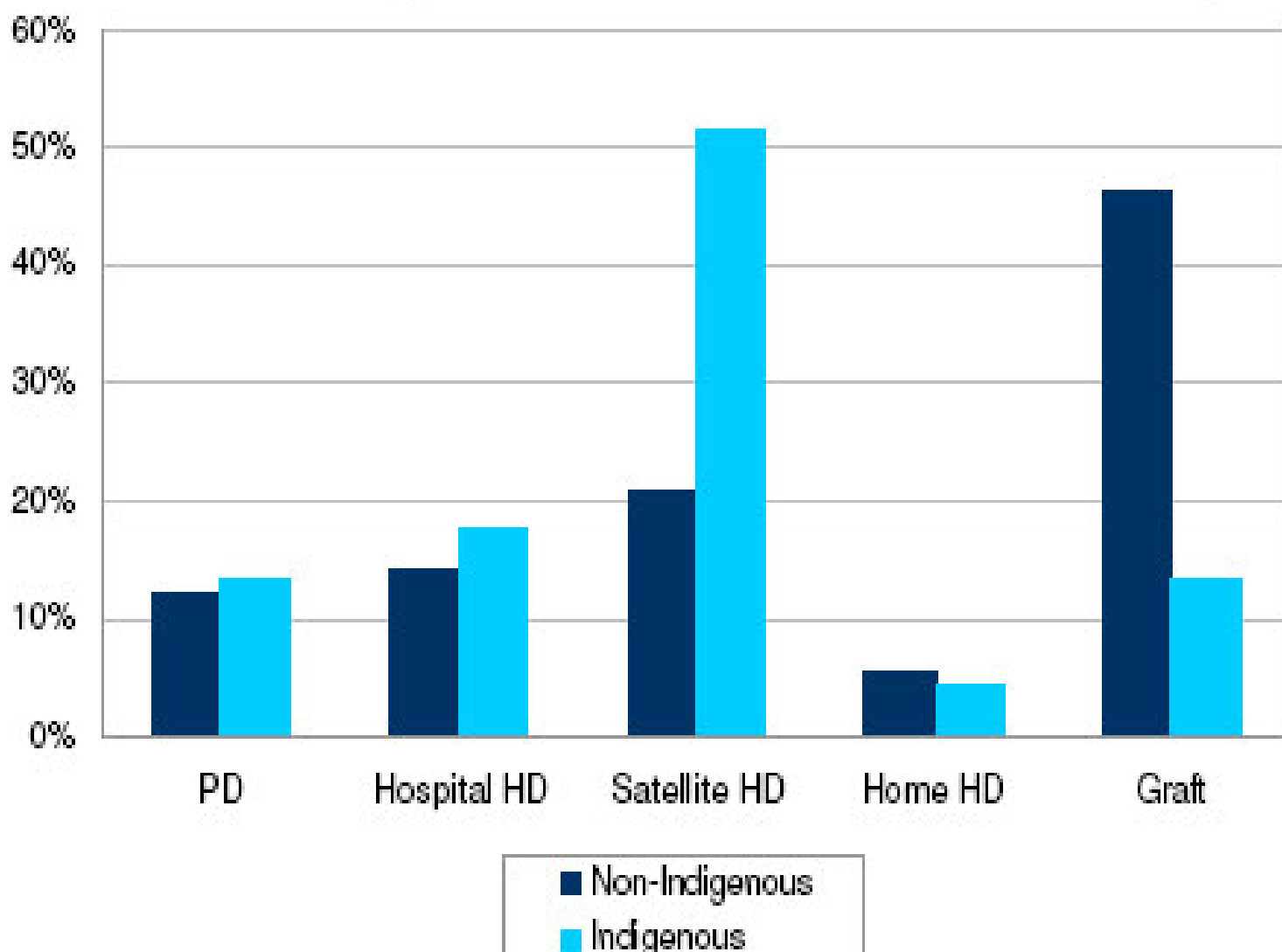


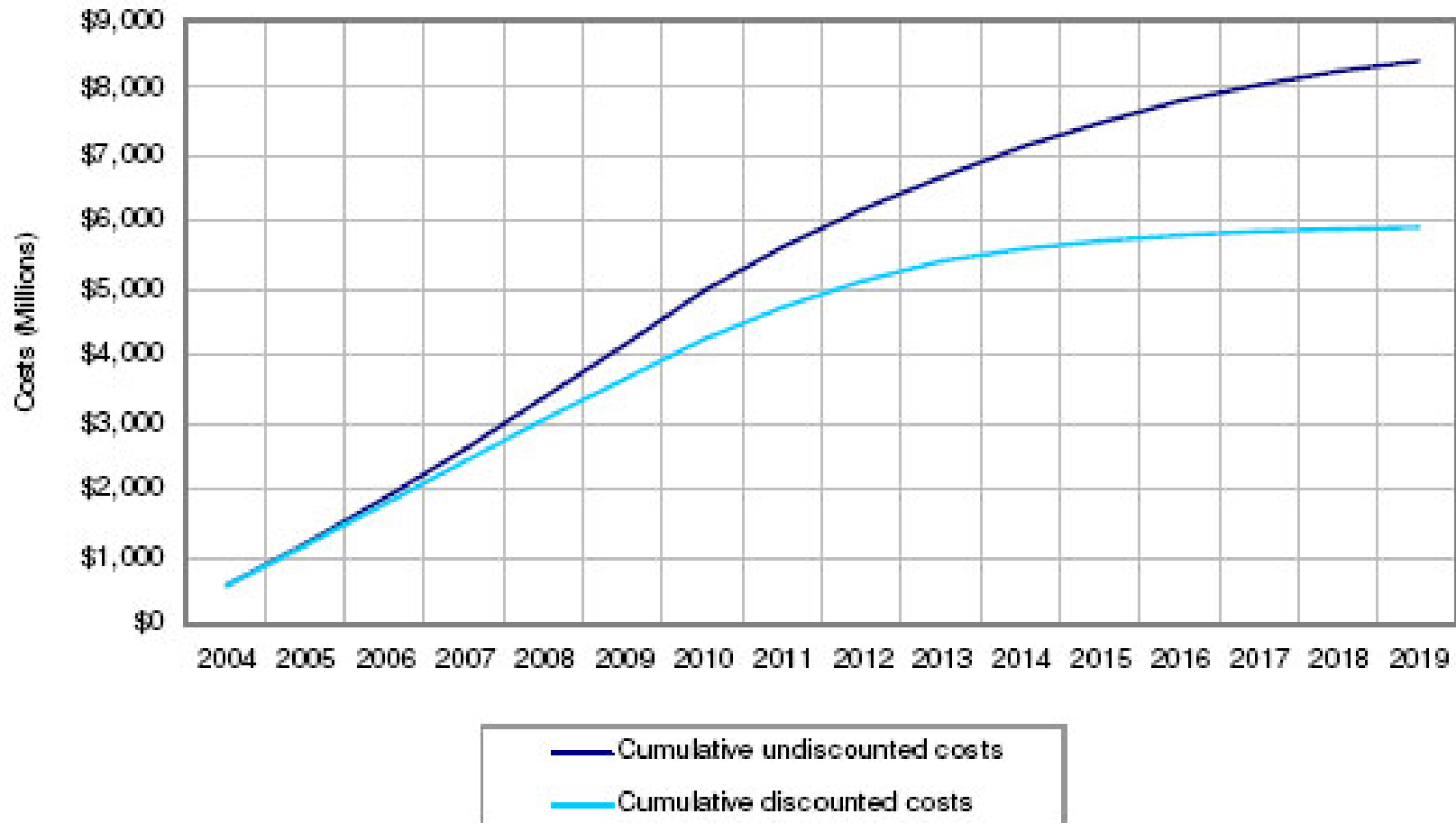
Table 7: Unit cost of dialysis per patient per year by modality

Resource items	<u>Home</u> Haemodialysis \$ unit cost per annum	Satellite Haemodialysis \$ unit cost per annum	<u>CAPD</u> \$ unit cost per annum	<u>Hospital</u> Haemodialysis \$ unit cost per annum
<b>TOTAL ANNUAL COST</b> (not including initial access)	<b>\$44,739</b>	\$48,631	\$56,828	<b>\$82,764</b>
Initial access (incl temporary access)	9,766	9,766	9,259	9,766

### 1.3 What is the cost of treating current and new cases of ESKD?

In today's dollars, the cumulative discounted total cost of RRT for all current and new ESKD patients, projected forward 10 years, will be approximately \$4 billion by the end of this decade, rising to almost \$6 billion by 2019 (Figure 25).

Figure 25: Cumulative discounted cost of RRT for all new (2004-2010, steady-state incidence estimates) and existing ESKD patients



# CKD and Aboriginal People in NSW

- ✗ Kidney disease → elevated risk of CV morbidity & mortality
- ✗ 2003-04 → 83,000 hospital admissions for CKD-associated illness among Aboriginal Australians

# End Stage Kidney Disease (ESKD)

- ✗ 9x increased risk of developing ESKD
  - ✗ Are younger
  - ✗ 12 x rate hospitalisation as non-Indigenous people
  - ✗ Only 1 in 5 people reach ESKD rest die of CV causes
- ✗ Location of dialysis centres
  - inequitable access to treatment
  - More likely to be conducted in hospital
- ✗ Many do not receive a kidney transplant

# Causes of end stage kidney disease

Figure 8: Distribution of primary causes of end-stage kidney disease in incident RRT patients (Source: ANZDATA, special data request, 2005)

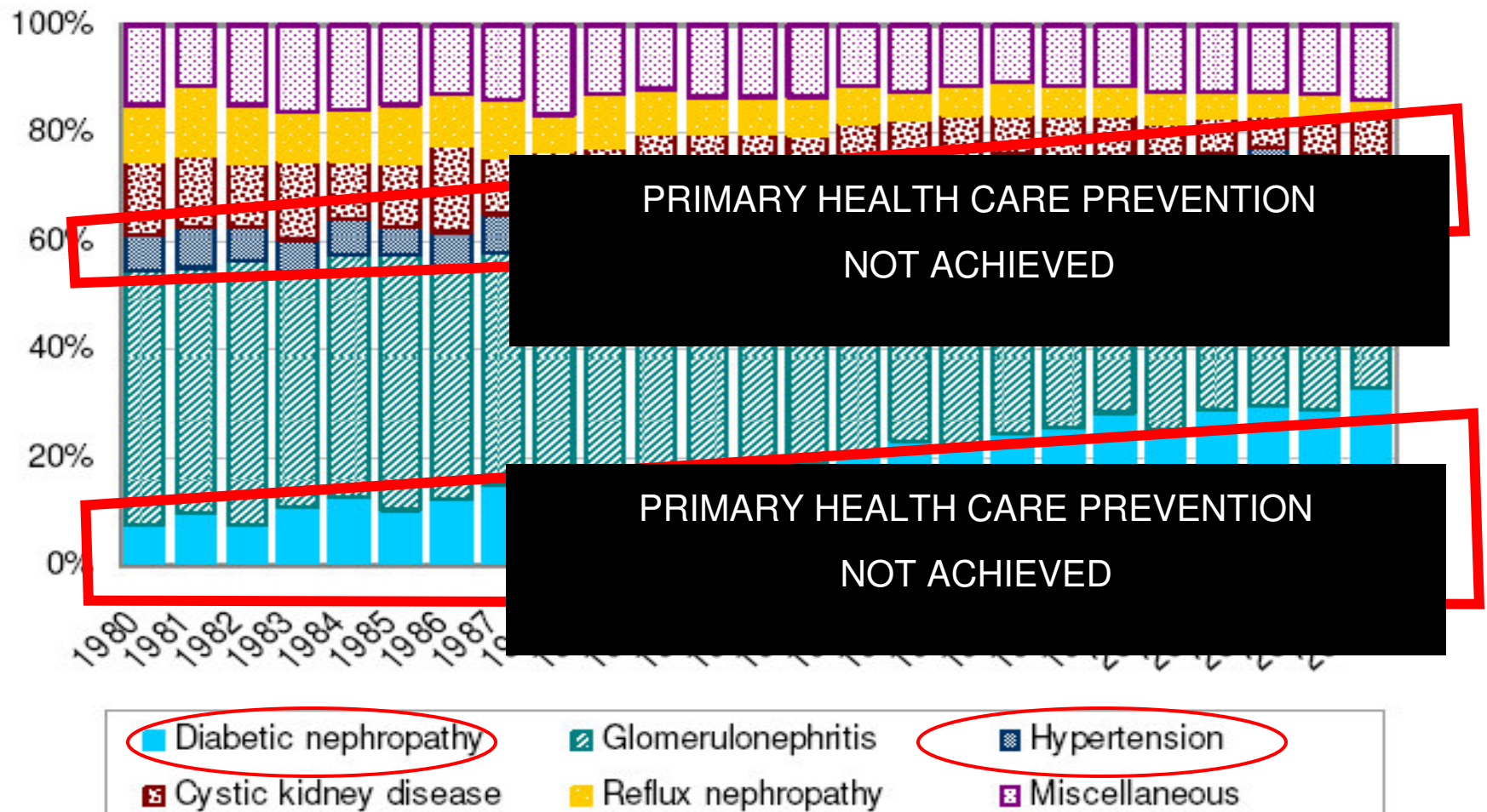
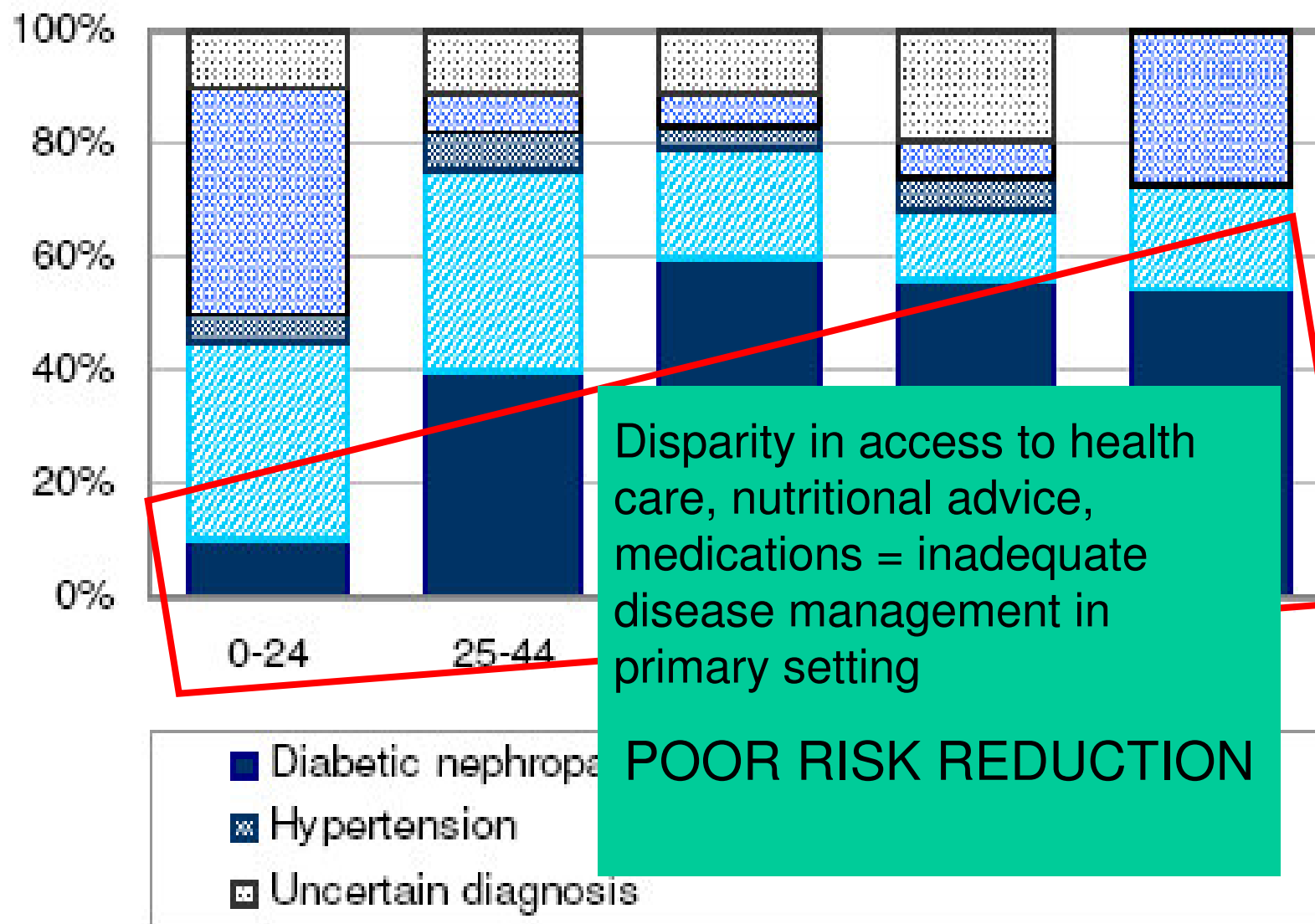
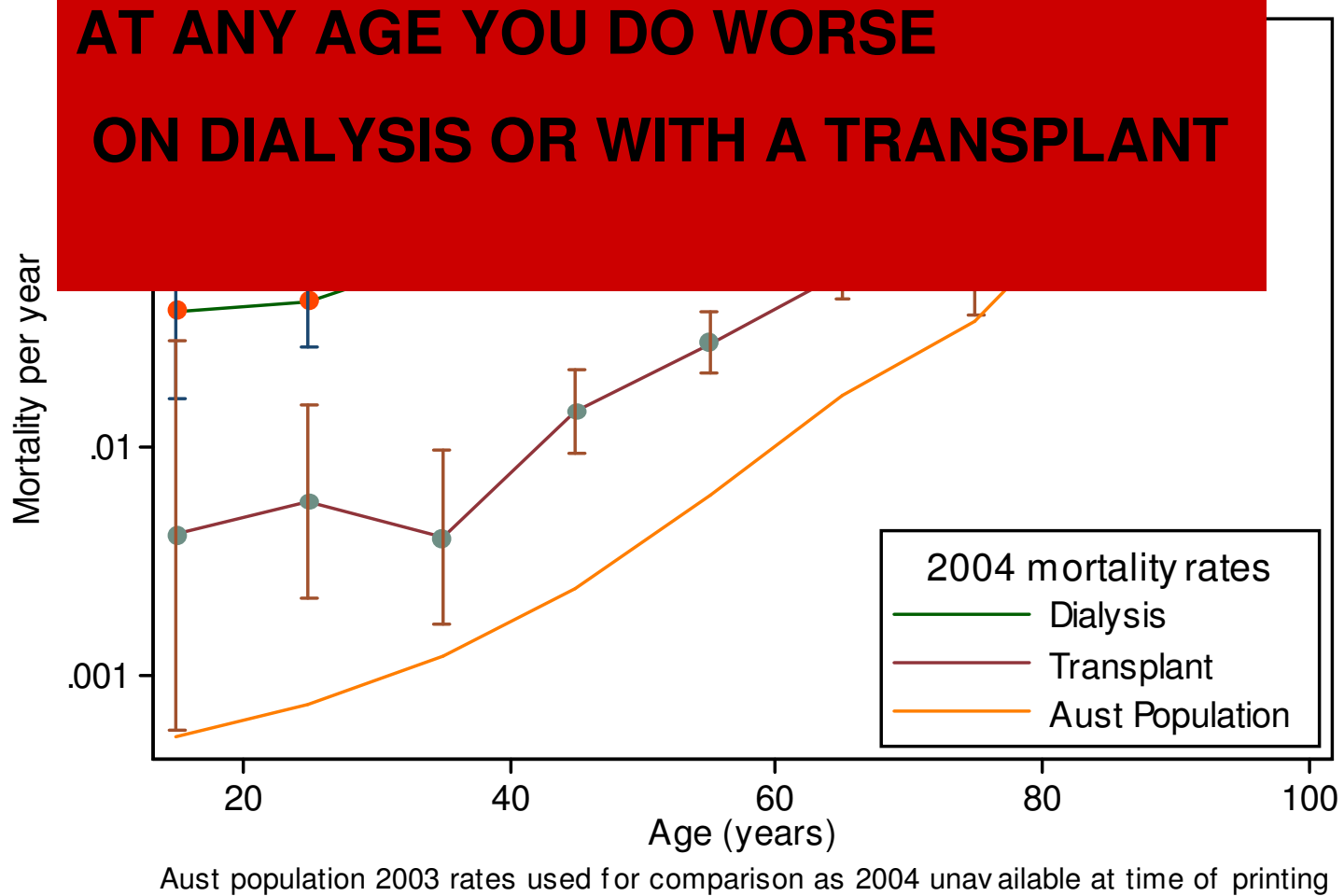


Figure 29: Distribution of primary kidney disease in Indigenous RRT patient by age for the 1996-2000 study cohort (Source: ANZDATA, special data request, 2005)



**Figure 3.3 Age-specific mortality rates for patients treated with dialysis or transplantation across, relative to the Australian population rates for 2004**



# Diet and Chronic Disease



Art work by Les Elvin

# Diet and Chronic Disease

- ④ Diet -essential component to treatment & management -renovascular disease(kidney, diabetes & CV)
- ④ Special diet can slow rate of kidney failure (limit build up of waste products & fluid in your body)
- ④ Paucity of resource material (consumer or professional) guiding & encouraging individuals with CKD & diabetes to eat bush tucker
- ④ A penchant for bush tucker is as much about taste as is it about culture, comfort, and maintaining control

# Bush Tucker Diet



# Diet Before European Settlement

- Nomadic hunter-gatherers
- Comprehensive knowledge of flora & fauna
- Physically fit & lean
- Varied diet
  - Animal foods major component
  - Plant foods [roots, tubers, seeds, fruits, nuts]
    - high in fibre & carbohydrates
    - slowly digested & absorbed
    - Traditional food preparation [baked whole, eaten raw]
    - max retention of nutrients

***Traditional foods = low energy but high density of nutrients***



# Diet Before European Settlement



## Food Preparation

- ④ Minimal processing & storage
- ④ No overcooking-no leaching of vitamins & minerals

## Fat

- ④ Prime time for hunting was when animals were 'fat'
- ④ Some animals [witchetty grubs & green ants] have relatively high fat content
- ④ Native animals much lower fat content than domesticated animals

## Delicacies

- ④ Traditional diet was low in sugars. Honey ants, sugar-bag, nectars & honey were delicacies & highly prized

# Effects of Colonisation on Diet



## Removed from traditional lands

- Difficult to hunt, gather food, take care of watering holes
- Assimilation Policy 1961 = reserves & missions → rations
- Welfare handouts & allowances below award wages
- Communal feeding- flour, bread, meat, less fruit, veg, dairy
- Exposure to - measles, influenza, whooping cough, diphtheria, leprosy & TB
- July 1965 –1966 granted equal wages = phase out Aboriginal labour & drive communities progressively off traditional lands
- 1972 policy of 'self-determination' - opportunity for community ownership or management of settlement retail stores – little range of or experience with western foods

# Result of Colonisation Today

## The result of colonisation

- ④ Devastating in all facets of our lives including culture & health
- ④ Life expectancy is 17yrs less
- ④ Higher rates of diabetes, kidney & CV disease
- ④ Higher % of overweight & obese
- ④ End stage disease management = removal from family & community



# Balancing Traditional Food in Contemporary Society



- ④ Transition from traditional diet & meal patterns to 'westernised' food habits has heralded major nutritional problems for Aboriginal Australians
- ④ If the opportunity exists to encourage or continue a traditional bushtucker diet it should be embraced
- ④ Food is a link to home - Diet is a component of self management and choice

# Recognising the Link With Diet To Better Health



- Ⓢ Diabetes, heart & renal disease share underlying causative factors including poor nutrition -they are potentially preventable
- Ⓢ Dialysis = removal from community
  - Ⓢ food is a link with home and family and a comfort



- Explore hunter-gather *diet & meal patterns* - incorporate them with increased physical activity into contemporary Aboriginal 'western' lifestyle
  - ? Will address CV diseases & assist with remission & regression of complications that accompany diabetes, kidney & CV disease
- ?Link food has with culture both ancestral & family & psychological benefit of self managed food choices



# The book



# Solution

- A book to provide information on selected elements of the nutritional content of bush tucker
- The elements presented in the book are those that require specific consideration when maintaining nutritional balance in renovascular disease
- The book enables adherence to a dietary limitations as outlined by the dietician but rather than forfeit food preference it allows favoured foods in acceptable quantities.



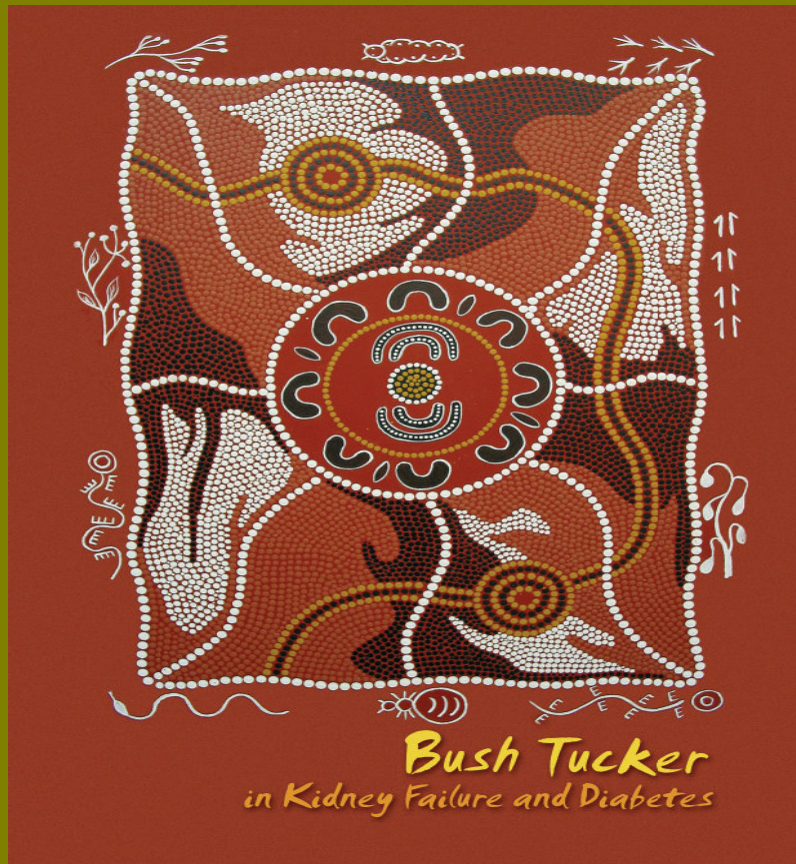
# Result.... 'Bush Tucker In Kidney Disease and Diabetes'

- Myself, Elizabeth Thompson, Aboriginal artist Les Elvin produced 'Bush Tucker in Kidney Failure and Diabetes' & has been produced and supplied free by & Amgen Australia
- Targets consumers & health care providers in the management of nutrition which would enable the consumption of bushtucker



# Thank you

## Acknowledge – AMGEN Australia



Available

Renal resource Centre

Phone: 0293623995

Freecall: 1800257189

[www.renalresource.com](http://www.renalresource.com)