Thank you for being part of LiLACS NZ over the years!

The information included on the following pages has been obtained from the six years of data collected for LiLACS NZ.

What is LiLACS NZ?

The LiLACS NZ longitudinal study was started in 2010 by the School of Population Health at the University of Auckland. In partnership with local community organisations, LiLACS NZ interviewed 934 people of advanced age living in the Bay of Plenty and Lakes District Health Board regions; Māori aged 80–90 years and non-Māori aged 85 years. Interviews and assessments were conducted annually.

From 2016, data collection has been put on hold while the project team considers and reports on the findings to you and your whānau, the Ministry of Health, local stakeholders and other parties invested in the health of older people.

What has happened to the information you have given?

To date, your information has been published in over 25 academic publications and 14 Ministry of Health reports and has helped foster at least 10 new research projects.

This website will give you access to all the reports that have been published to date along with information about LiLACS NZ: https://www.fmhs.auckland.ac.nz/en/faculty/lilacs.html

You can also phone Professor Ngaire Kerse on 09 923 4467 or send us an email at lilacs@auckland.ac.nz.
LiLACS NZ aims to determine the predictors of successful advanced ageing and understand the trajectories of health and wellbeing in advanced age. To obtain information about the current health status of older Māori and non-Māori and how that has changed over time we asked questions about physical and psychological health status, health behaviours including smoking, alcohol use and nutrition risk, environmental factors, residential mobility, use of health services, end of life decision-making, social network structures and social support exchanges. Wave 1 interviews were conducted in 2010/2011 and Wave 6 interviews were conducted in 2015/2016.

The key areas of the study that are reported in this document are: exercise and independence, activities, nutrition, mental health and quality of life. These areas were identified by study participants as the ones most important to ageing well.

Some things participants told us....

'I am 87 years old and my wife is 84. We have been married for 62 years. We are good companions. My wife is a bit more active physically than I am but we do all things together and that is all very important.'

'My mobility is not as good as it used to be but is not really a great problem as I am still working. Life is what you make it.'

'A grandchild rings me from wherever and asks how I am. I have two sons who live reasonably close... and they keep an eye on my home.

'Breathing and enjoying life to the fullest of what twilight years I have left ahead of me. Life in general has its ups and downs, joy and sadness, but I'm hanging in there.'

'I think the highlights of this stage of life would be [that] I can still use my brain, I am still living in my own home, still able to drive, still doing my own housework...'

'Kia kaha, kia kaha e kete kia kaha.'
**EXERCISE AND INDEPENDENCE**

In the LiLAC Study, functional status and other measures of independence and frailty were recorded. Functional status means the level of independence in daily activities and is a strong predictor of mortality, hospitalisations and institutionalisation.

### Key findings

Although most participants maintained functional status from one year to the next, 15%-18% of people *improved* in function during the study.

- More than 1/3 of people had fallen in the last 12 months.

At Wave 1, 95% of participants were *independent* in basic daily activities (self-care such as dressing and walking) and 67% were independent in advanced daily activities (such as carrying things, housework and driving).

- 31% of people received informal support (unfunded help or assistance).
- 49% of people received formal support (home help and personal care).

### Exercises you can do to maintain fitness

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chair walking ....</strong></td>
<td><em>(warm-up)</em> While seated, march on the spot for 1 minute – rest – and then march for another minute.</td>
</tr>
<tr>
<td><strong>Push and pull ....</strong></td>
<td><em>(warm-up)</em> Sit with a straight back, raise your arms above your head, then relax. Push your arms out in front of you, then relax. Do this 5 or 6 times.</td>
</tr>
<tr>
<td><strong>Sit – stand ........</strong></td>
<td>Sit with your feet about hip width apart, keeping your feet flat on the floor, stand up. Pause for 10 sec then slowly lower yourself back into the chair. Repeat 5 or 6 times.</td>
</tr>
<tr>
<td><strong>Wall Press ........</strong></td>
<td>On a clear wall, place your hands in line with your shoulders. Lower yourself to the wall, until your nose almost touches, then push off. The further away from the wall that your feet are, the harder the exercise.</td>
</tr>
<tr>
<td><strong>Breathing ........</strong></td>
<td>Sit comfortably in a chair. Place one hand on your belly and one on your chest. Take 5 slow breathes in and out, making sure that the hand on your belly moves first when you breathe in, followed by the hand on your chest.</td>
</tr>
</tbody>
</table>
ACTIVITIES

Valuing contributions and providing opportunities to be productive is important to Positive Ageing and may increase resilience in advanced age.

Key findings

LiLACS NZ participants continued to volunteer as they grew older and a small number continued to engage in paid work.

- Around one third of participants gave some type of care or assistance to others at least occasionally.
- Volunteer work included professional and leadership roles (30%), roles in Māori cultural activities and organisations (29%), contributing to other voluntary organisations (27%; health-related, religious, community projects) and working in opportunity shops (18%; mainly women).

Participation in voluntary activity or work over time

- In Wave 1, 44% of participants lived alone; more women lived alone than men.

Lists of community and social groups that meet in your area can be obtained from:

Citizen’s Advice Bureau – 0800 367 222; National Website: www.cab.org.nz
Eldernet - 03 388 1204; https://www.eldernet.co.nz/Home
Older people often need to eat more and have an increased risk of developing health problems as a result of not eating enough.

Nutrition guidelines are currently set for people aged over 70 years so the comprehensive food assessments collected in LiLACS NZ provide new detail of the nutrition needs of people of advanced age and will help to inform more accurate advice about food for the age group.

**Key findings**

- LiLACS NZ found differences in the food intake for Māori and non-Māori. Overall more protein may be needed.

**Percentage of LiLACS NZ people meeting the national nutrition guidelines**

<table>
<thead>
<tr>
<th></th>
<th>Recommended % of energy intake for adults</th>
<th>% of men meeting this energy intake</th>
<th>% of women meeting this energy intake</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Māori</td>
<td>Non-Māori</td>
<td>Māori</td>
</tr>
<tr>
<td>Protein</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-25%</td>
<td>36</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>45-65%</td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>Fat</td>
<td>20-35%</td>
<td></td>
<td>98</td>
</tr>
</tbody>
</table>

- 49% of Māori and 38% of non-Māori participants were at high nutrition risk.

**Dietary sources of nutrients**

- **PROTEIN**: bread, milk, beef/veal, fish/seafood, pork and poultry, eggs, milk products, legumes, cereals nuts, meat alternatives (soy)
- **CARBOHYDRATE**: Bread, fruit, potato/kumara/taro, wholegrain cereals, legumes (peas/beans/lentils), sugar/sweets, cakes/muffins
- **HEALTHY (UNSATURATED) FAT**: Nuts/seeds, margarines (particularly canola, sunflower), legumes, oily fish, milk, avocados, eggs
- **DIETARY FIBRE**: bread, fruit, vegetables, potatoes/kumara/taro, wholegrain cereals, legumes, seeds
MENTAL HEALTH

Depression and dementia are common and significant mental health problems. Dementia increases with age so has the potential to cause major problems for future generations of older people and their whānau.

Dementia is associated with lower education and socioeconomic status, and having other health conditions (e.g. cardiovascular disease and obesity).

Key findings

35% of participants reported depression in Wave 1.
- Depression in combination with cardiovascular disease, chronic lung disease or diabetes worsened physical health and increased health service use.

16% of participants had dementia in Wave 1.
- Dementia in combination with cardiovascular disease, chronic lung disease or diabetes worsened physical health and increased health service use.

Most participants (82%) had emotional support available.
- More than 90% of people were satisfied most or all of the time in their relationships with family and friends.
- Overall 10% of people reported a need for more emotional support (17% of those living with others, 6% of those living with their spouse, 9% of those living alone).

Cognitive stimulation decreases the risk of dementia

In addition to following a healthy diet and being physically active, do some of the following things to keep your brain stimulated.

<table>
<thead>
<tr>
<th>Brain teasers: Sudoku, crosswords, puzzles</th>
<th>Reading</th>
<th>Complex social roles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cultural activities</td>
<td>Kapahaka, Dancing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Activities: bridge, mahjong, chess</td>
<td>Learn something new</td>
</tr>
</tbody>
</table>
‘I have accomplished what I set out to do. I’m living a satisfactory life and I don’t wish for anything more.’

The life in years (quality of life), rather than the years of life (quantity of life), may be particularly relevant for older people.

In LiLACS NZ, quality of life was assessed in relation to mental and physical health.

### Key findings

Overall, mental health-related quality of life was moderately high while physical health-related quality of life was moderately low.

#### Higher quality of life was associated with:

- Economic wellbeing
- Giving care or assistance to others (physical)
- Volunteering or doing paid work (physical)
- Higher functional status (physical) plus physical and mental health-related quality of life were both maintained when functional status declined
- Receiving formal and informal care
- For older Maori, greater language and cultural engagement

#### Lower quality of life was associated with:

- Unmet need for practical and emotional support
- Dementia
- Depression, particularly when combined with physical health conditions
ALLOWANCES AND SUBSIDIES AVAILABLE

Care Plus: Provides extra funding for GP visits.
  Contact: Ask your GP Practice doctor or nurse for an assessment

Disability allowance: Helps with extra costs due to disability or a medical condition.
  Contact: Ministry of Social Development through the WINZ office (see below)

Hearing Aid Funding or Hearing Aid Subsidy Schemes: Pays for or subsidises hearing aids.
  Contact: Ministry of Health through the WINZ office (see below) or ‘Accessable’ 0508 001 002

High Use Health Card (also called High User Card): Discounts for high users of health care.
  Contact: Free 0800 243 666 (talk to your doctor to see if you qualify)

Living alone and accommodation allowance: Helps with the costs of renting or owning a home.
  Contact: Ministry of Social Development through the WINZ office (see below)

Mobility parking scheme: Subsidises parking for people with limited mobility.
  Contact (National): Free 0800 227 2255 (talk to your doctor to see if you qualify)

Pharmaceutical Subsidy Card: Helps with prescription costs for high prescription users.
  Contact: Talk to your pharmacist to see if you qualify (Funded by WINZ: see below)

Rates Rebate Scheme: Discounts Council rates for low income earners.
  Contact: Apply to your local council; National Website www.ratesrebates.govt.nz

SuperGold Card: Discounts on businesses and government and local council services.
  Contact: Free 0800 254 565 or Work and Income New Zealand (see below)

Total Mobility Scheme: Subsidises taxi fares if you have mobility difficulties.
  Contact: Ministry of Transport or your Regional Council

Veterans service-related allowances: Helps veterans and their families with gardening, lawn mowing, medical alarms and medical costs, hearing aids etc.
  Contact: Veterans Affairs Free 0800 4 838 372; Email veterans@nzdf.mil.nz

Other resources

Age Concern: Promotes the rights, quality of life and well-being of older people in New Zealand.
  Contact (National): 04 801 9338; Website http://www.ageconcern.org.nz/

Citizens Advice Bureau: A free, confidential and impartial information and referral service.
  Contact (National): Free 0800 367 222

Eldernet: Provides information about services for older people, including residential care advice.
  Contact (National): 03 388 1204; Website https://www.eldernet.co.nz/Home

Health and Disability Advocacy: A free service to assist healthcare users to resolve complaints.
  Contact: National Free 0800 555 050; Tauranga 07 577 1715; Whakatane 07 307 0646; Rotorua 07 349 0182

Life Unlimited: Offers free hearing evaluations, information, and advice.
  Contact (National): Free 0800 008 011; Website: www.lifeunlimited.org.nz

Ministry of Health: Provides information about publicly-funded health and disability services.
  Contact: Free 0800 855 066; Website www.health.govt.nz

Ministry of Social Development: Provides information and advice on services and entitlements.
  Contact: Free 0800 552 002; Email seniors@msd.govt.nz; Website www.seniors.msd.govt.nz

NASC (Needs Assessment and Service Coordination Service): DHB funded. Conducts health needs assessment and co-ordinates personal and household care services and carer support.
  Contact: Tauranga 07 571 0093; Whakatane 07 306 0986; Rotorua 0800 262 477

St John Health Shuttle: Free transport to medical-related appointments (bookings preferred).
  Contact: National Free 0800 000 606; Bay of Plenty 07 578 2011; Rotorua 07 349 7658

Seniorline: Provides information on how to get help to stay at home and relief care for caregivers.
  Contact (National): Free 0800 725 463; Website www.adhb.govt.nz/seniorline

Work and Income New Zealand: Provides information about benefits and pensions.
  Contact (National): Free 0800 559 009