Ensuring that Cook Islands youth understand health monitoring in which they are participants:

Linking health monitoring into learning through the Pacific Science for Health Literacy Project

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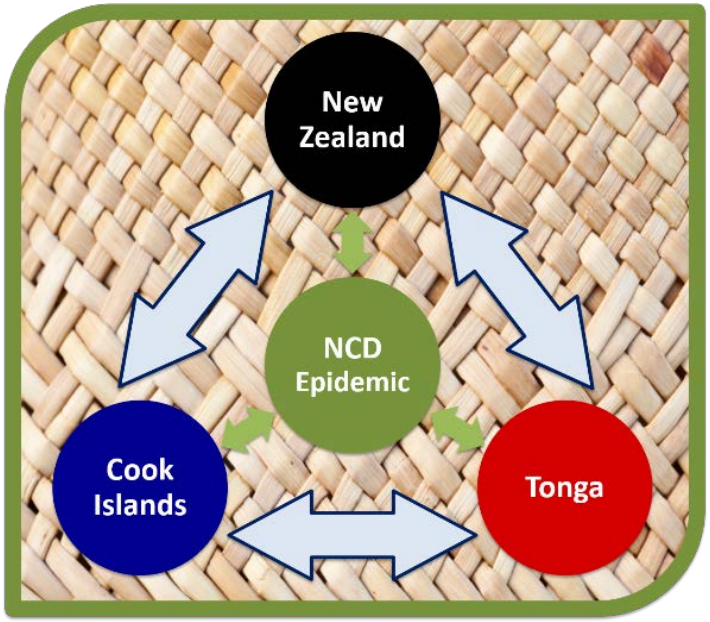
Project Goals

Via collaboration between education, health & science:

- Develop and test culturally appropriate learning resources to enable context-embedded science for health literacy education in the Cook Islands and Tonga, within the context of the NCD epidemic.



- Measure programme impact on:
  - Teaching practice
  - The development of scientific and health literacy in adolescents
  - Health knowledge, attitudes and behaviours in adolescents
  - Attitudes towards and behaviours relating to multi-sectoral collaboration in participating institutions
- Enable the **potential** for prospective studies to examine long term health and education impacts

Pacific Science for Health Literacy Project

2013

- Evaluation methods co-constructed by Education and Health.
- Potential for health measures discussed but agreed not to include it.

2014

- The programme started
- Research participation rates quite low.
- Baseline data collected Year 9 & 11
- Summaries of data shared with Project team

2015

- Achieved significant increase in research participation rates by students.
- Late 2015/early 2016 teachers identified the potential value to students of health profiles.

Empowering youth as agents of healthful change within communities

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New Zealand Foreign Affairs & Trade Aid Programme

Need for Health Profile data emerged from Teachers identifying:

- **increased engagement** from students when learning was set in the context of health issues in their community
- evidence that the programme **was increasing student awareness of their health** and encouraging **evidence-based decision making** by students about nutrition and physical activity
- feedback from participating students indicating that they placed a **very high value on having access to data about health** in their community
- feedback from participating students indicating that **they wanted to have access to and understand data** about their own health

Enabling this

- **Regular biannual school health checks –** opportunity
- **Increased** to include; blood pressure, blood glucose, blood cholesterol, waist and hip circumference
- To **support empowerment**, health monitoring must be an active learning experience
- Development of the "My Health Profile" booklet for trial in 2016

What does it include?

1 Oraanga e Pitoenua
2 Body composition
3 Blood Pressure
4 Blood Lipids
5 Blood Glucose
6 Tobacco
7 Alcohol
8 Marijuana

Also available as an ebook

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NEW ZEALAND FOREIGN AFFAIRS & TRADE Aid Programme

Body Size Measurements

Body Mass Index (BMI) for Teenagers

BMI may indicate whether someone is a healthy weight or not.

$$\text{BMI} = \frac{\text{your mass in kg}}{\text{square of your height (m}^2\text{)}}$$

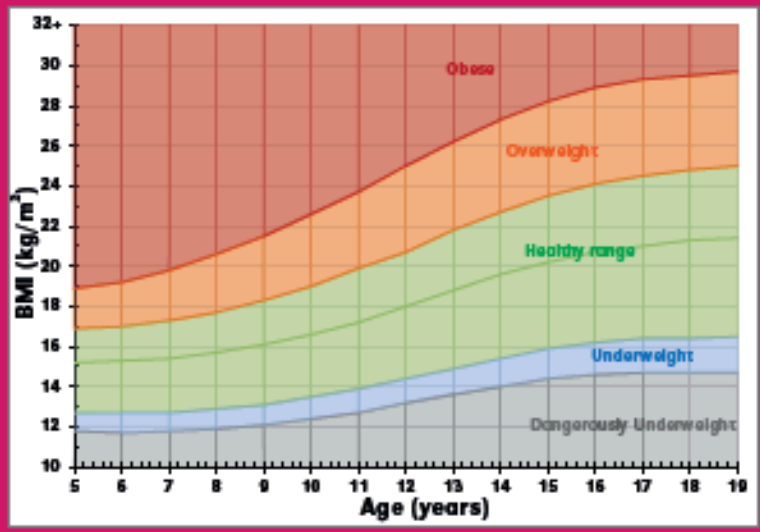
BMI Categories

The BMI categories for adults are not the same as the BMI categories for children and teens, because children and teens are still growing.

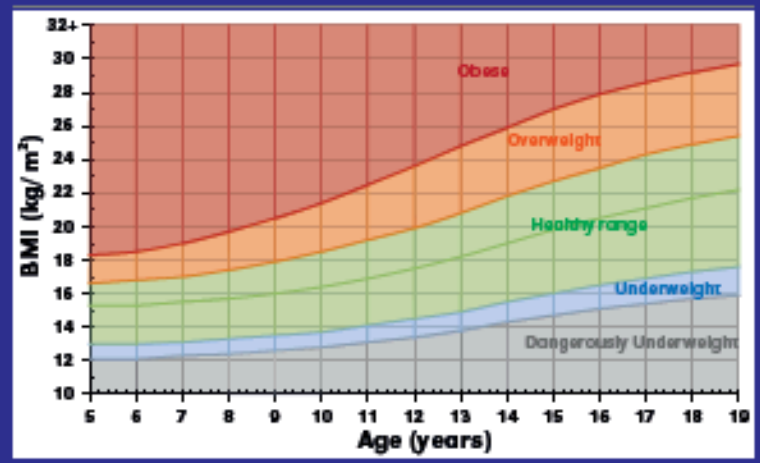
You can workout your BMI category from the charts using your AGE and BMI.

Year					
My Height (m)					
My Weight (kg)					
My calculated BMI					
My BMI category					

BMI Categories for Girls (aged 5-19 years)



BMI Categories for Boys (aged 5-19 years)



Waist-to-Height Ratio

- Your waist-to-height ratio is used to find out if you are carrying extra fat around your middle, as this is not healthy.
- To measure your waist, place a tape measure just above the belly button (or just above the upper hip bone).

To calculate your waist-to-height ratio, you need to know your waist measurement and height.

$$\text{Waist-to-height ratio} = \frac{\text{Waist measurement (cm)}}{\text{Height (cm)}}$$

A healthy waist measurement is less than half your height.

Waist-to-Height ratio	Health Risk
0.5 or less	Low
Greater than 0.5	Increased

- Young people with a waist-to-height ratio that is greater than 0.5 have too much belly-fat (around the middle).
- This can lead to unhealthy cholesterol levels, high blood pressure and diabetes, even in young people.
- Young people with too much fat around their middle are likely to have excess fat as adults.

Year					
My Waist measurement (cm)					
My Height (cm)					
My Waist-to-Height ratio					

Waist-to-Hip Ratio

- A waist-to-hip ratio compares the size of your hips to the size of your waist.
- Use a measuring tape to measure your hips at the widest part of your buttocks.

To calculate your waist-to-hip ratio, you need to know your waist and hip measurements.

$$\text{Waist-to-hip ratio} = \frac{\text{Waist measurement (cm)}}{\text{Hip measurement (cm)}}$$

Waist-to-Hip ratio		Health Risk	Body Shape
Female	Male		
0.85 or less	0.90 or less	Low	Pear
Greater than 0.85	Greater than 0.90	Increased	Apple

Body Shape

Your body shape is another indicator of your health.

Pear shaped

- If you are a pear shape, you tend to carry most your weight in your hips, thighs and buttocks.
- Storing fat in your lower half reduces your risk of getting diabetes and heart disease.

Apple shaped

- If you carry most of your weight in your middle area and upper body, your body is an apple shape.
- Apple-shaped people carry more weight around their waists. This increases your risk of disease.

Year					
My Hip measurement (cm)					
My Waist-to-Hip ratio					

My Healthy Life Plan

My goal What is it that you want to achieve?	**Why is this important?**

Choosing your actions – break down your goal into small, specific steps that are easy to stick with in the long run.

My steps are ... (***Make it detailed:*** How much? How many? How long for? Where? With who? What support?)	**How often ...** Which days? What time?

Evaluation Potential:

- Increased potential to identify the long term impact on metabolic health

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- Maraurau o te Pae Api'i, Ministry of Education Cook Islands

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