Healthy Start to Life Education for Adolescents Project Pacific Region

# **Reducing the Risk**

## **Teacher Presentation Slides**

## **Learning Objective 6**

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Environment, LIFESTYLE AND DIET throughout life impact on the **RISK** 

of developing non-communicable diseases (NCDs) as adults.

#### **Contents: Teacher Slide Links to Student Learning Resources**

Click on the SLR images to hyperlink you to the appropriate slides in this presentation



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#### **Anticipatory Reading Guide 1**

**SLR 13** 

Before reading the Student Reading, 'Children Programmed for Obesity' ...

Tring

1. Read through the statements on the Anticipatory Reading Guide

2. Place a tick in the column on the left hand side if you agree or not with each statement.



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#### Anticipatory Reading Guide 2

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#### Anticipatory Reading Guide 3

SLR 13

To complete the right hand column, you must first undertake a series of activities so that you can make an informed decision.



#### for Obesity

Children Programmed for Obesity

During the next week, you will be using the resource "Children Programmed for Obesity" to explore issues related to diabetes risk.

BEFORE you start the activities, read through each statement below and mark the LEFT hand side of the table with a *tick* to show whether you AGREE, DISAGREE or are UNSURE for each statement.

After you have completed the reading and activities, return to this sheet and confirm or revise your choices by marking the RIGHT hand side of the table with a tak to show whether you AGREE or DISAGREE with each statement. You ALSO need to note down evidence from the reading that supports your choice.



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Vrit

	Underweight	Healthy weight	Overweight	Obese
BMI value	<18.5	18.5–25	25–30	>30

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**SLR 14** 

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Male A 39 years old BMI = 30.2 kg/m<sup>2</sup> Using BMI, he is classified as obese

The Dexa scan shows that he has **12.1% fat** 

With **12.1%** body fat, he is **NOT** obese

In this case, BMI has not provided an accurate measure of obesity.



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6

Male B 37 years old BMI = 28.5 kg/m<sup>2</sup> Using BMI, he is classified as overweight

The Dexa scan shows that over a third of his body is fat

His body tissue is composed of 34.2% fat

In this case, BMI has underestimated the body composition



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**SLR 15** 

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Data from New Zealand Ministry of Health (2012)

NZ young people	Overweight (%)			Obese (%)		
Age (years)	Māori	Pacific	All NZ	Māori	Pacific	All NZ
5–9	25	18	17	13	30	11
10–14	23	32	23	25	42	14
15–19	38	41	24	15	27	10
20–24	34	24	29	24	55	19

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Infant mortality rates from 1901 to 1910 (left) compared with coronary heart disease rates in men from 1968 to 1978 in England and Wales CPO

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Image courtesy of University of Southampton, with permission

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In 1986, they found birth records from a region called **Hertfordshire**, where from 1911 onwards, a woman named **Ethel Margaret Burnside**, Hertfordshire's first Lady Inspector of Midwives, had made sure that very accurate records of births and the early years of children's lives were kept by midwives and health visitors.

The county of Hertfordshire in England

E. Margaret Burnside, Hertfordshire's First Lady Inspector of Midwives

Image courtesy of University of Southampton, with permission



Weight eight Condition, and Remarks of No. of Food. 1st Year Birth. Visits. Health Visitor. D + les 24 2 lbs B. althe & well diveloped. 184 US B 12 8 les h. Bury Geen Le Madham. Had measles preumous . Bot. y. 20 11 14. about in A neck opened. and for anelle still shen 2 3 yrs. abdomen very large of Buchland Althe bard 9 normal Schurt

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An extract from the health visitor's records. Image courtesy of Barker (2003), with permission

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**Aim:** To develop a small animal model to find out whether a high fat diet during pregnancy has the same or a different effect as undernourishment during pregnancy on the risk of obesity and type 2 diabetes

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Mother's diet during pregnancy	Diet of the offspring		
1. Balanced diet	1a. Balanced diet		
(control group)	1b. High fat diet		
2 Underneurished	2a. Balanced diet		
z. Undernourished	2b. High fat diet		
2 Uigh fat diat	3a. Balanced diet		
5. Figh lat diet	3b. High fat diet		

Effect of maternal undernourishment on body fat in the offspring at adulthood in a rat-model

Effect of maternal high fat diet on body fat in the offspring at adulthood in a rat model





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#### What can science tell us about the RISK of obesity?

During our lifetime, we are exposed to many different factors that impact on our overall risk of obesity and type 2 diabetes. Some of these will stay constant throughout our lives, some will change.

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**SLR 18** 

There are some risks that we cannot alter (like our genetic inheritance), but there are others we can alter.

We cannot be sure whether we will develop type 2 diabetes or not, but we can take steps to MINIMISE our risk and the risk of our family, friends and community. Trying to maintain a balance of energy (food) and physical activity is an important step for ALL of us.



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#### Anticipatory Reading Guide 4

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After reading '*Children Programmed* for Obesity' and completing various tasks, you will confirm or revise your choices AND write in the **proof** from the reading that supports your choice.

	AFTER c	ompleting	the reading and act
Statement	Agree	Disagree	Evidence
Diabetes is common in all countries around the world			Once done, turn and talk about your choices with a classmate.
			classmate.

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#### What is Obesity? 1

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#### **Recognising obesity**

For each of the pairs below, do you think they are:

- A. Underweight
- B. Healthy weight
- C. Overweight
- D. Obese



Mitola et al. (2007) Agreement with Satisfaction in Adolescent Body Size between Female Caregivers and Teens from a Low-income African-American Community *Journal of Pediatric Psychology* 32(1) pp. 42–51, 2007







#### Analysing the Evidence 1

#### What does the evidence tell us?

1. What does the information in the graphs tell us about the effect of diet in the womb on the RISK of obesity in adulthood in the rat model?

2. What does the information in the graphs tell us about the effect of diet after weaning on the RISK of obesity in adulthood in the rat model?

3. What does the information in the graphs tell us about the effect of diet in the womb on the RISK of type 2 diabetes in adulthood in the rat model?

4. What does the information in the graphs tell us about the effect of diet after weaning on the RISK of type 2 diabetes in adulthood in the rat model?







The Mail Tate View (17): E Monomandra no Tela In Tangata O University of Auctional, Cack Mannish Ministry of Education and Cock Mannah Manayor of Haukh 2010 This workshall may be photocopied for use in schools

#### Analysing the Evidence 2

#### What does the evidence tell us?

5. Did the scientists collect any evidence that may provide reasons for these patterns?

6. Did the environment in the womb affect the phenotype of the animals when they were adults?

7. Is the evidence similar or different to that collected by Professor Barker's team in the human population? Explain how it is similar or different.

8. Write a conclusion for the experiment.



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#### Analysing the Evidence 3

#### What do these graphs tell us?

1. What does the information in the graphs tell us about the effect of undernutrition in the womb on the risk of obesity in adulthood in the rat model? Are these results the same or different to the previous experiment?

2. What does the information in the graphs tell us about the effect of a high fat diet in the womb on the risk of obesity in adulthood in the rat model?



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End of 'Analysing the Evidence' take me back to the Contents page

#### Analysing the Evidence 4

#### What do these graphs tell us?

3. Why do you think the scientists chose balanced and high fat as the diets that they provided for the rat-pups after weaning?

4. Why do you think the scientists repeated the experiments with undernutrition when they developed this model?

5. From the evidence that you have, can you predict what the effect of a high fat diet during pregnancy might be on the risk of type 2 diabetes in adulthood?



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**SLR 17** 

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**SLR 18** 

Energy in - Energy used = Energy stored

## Are your energy consumption and activity in balance?

#### **Question 1**

How many servings of fruit and vegetables (fresh, frozen or canned) do you eat on an average day?

A. None
B. 1–2 servings
C. 3–4 servings
D. 5 or more servings







**SLR 18** 



# Are your energy consumption and activity in balance?

#### **Question 2**

On average, how many minutes do you spend (out of school time) watching TV or in front of a computer screen?

A. Under 60 minutes
B. 60–90 minutes
C. 90–120 minutes
D. More than 120 minutes



1	When tenergy	the amount of energy o used, we gain weight	consumed Excess er	is greater than the nergy is stored in the	amount of body as fat.
1	Energy in - Energy used - Energy stored - Energy stored - Energy in - Energy i	e at which we use ener lividual metabolism.	gy varies	depending on how a	ctive we are, and on
Ar	e your energy co	onsumption ar	nd act	ivity in balar	ice?
hir •	nk about your physical activ Do you know what the re for a person of your age Do you think you are eat	ity and your diet over t commended food and ing well and doing eno	he past w activity gu ugh physic	eek. uidelines are cal activity?	PHYSIC
۱n	Islands?	ollowing table to find	out.	What do you think the	What do you think a typical teenage
Q	lestion	Options	Your answer	guidelines for health should be?	should be doing/ eating?
1.	How many servings of fruit (fresh, frazen or canned with no added	A. None B. 1-2 servings C. 3-4 servings			
	average day?	D. 5 or more servings			
2.	Average day? How many servings of vegetables (fresh, frazen or canned) do you eat on an average day?	D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
2.	and any too you serve on any average doy? How many servings of vegetables (fresh, frazen or canned) do you est on an average, do you spend doing moderate to vigorous exercise (s.g. brisk weißing) each doy?	D. 5 or more servings A. None 8, 1-2 servings C. 3-4 servings D. 5 or more servings A. 0-30 minutes C. 60-90 minutes D. Over 90 minutes			



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## Are your energy consumption and activity in balance?

#### **Question 3**

How much time, on average, do you spend doing moderate exercise (e.g. brisk walking) to vigorous exercise each day?

- A. 0–30 minutes B. 30–60 minutes
- C. 60–90 minutes
- D. Over 90 minutes



-					(1 of 2)
Ì	energy	used, we gain weight	Excess er	nergy is stored in the	body as fat.
1	Energy in - Energy used our ind	e at which we use ener ividual metabolism.	gy varies	depending on how o	ctive we are, and on
٩r	e your energy co	onsumption ar	nd act	ivity in balar	ice?
hin • •	ik about your physical activ Do you know what the re for a person of your age? Do you think you are eat How do you think you co Islands? wer the questions in the f	ity and your diet over t commended food and ing well and doing eno mpare with other teens ollowing table to find	he past w activity gu ugh physio sgers in th out.	eek. uidelines are cal activity? ue Cook	PHYSIC
0	estion	Options	Your	What do you think the guidelines for health should be?	What do you think a typical teenager should be doing/ eating?
1.	How many servings of fruit (fresh, frazen or canned with no added sugar) do you eat on an average day?	A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
1.	How many servings of fruit (fresh, frazen or conned with no added sugar) do you eat on an average day? How many servings of vegetables (fresh, frazen or canned) do you eat on an average day?	A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
1.	How many servings of full (fresh, fream or caned with no added suppr) do yoe at on an average day! How many servings of vegetables (freah, fream or caned) do you eat on an average day! How much time, on average, do you spend doing moderate to vigorous exercise (e.g. briak walking) each day?	A. None B. 1–2 servings C. 3–4 servings D. 5 or more servings A. None B. 1–2 servings C. 3–4 servings D. 5 or more servings A. 0–30 minutes B. 30–60 minutes D. Over 90 minutes			

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# Are your energy consumption and activity in balance?

#### **Question 4**

How many cans of fizzy or soft drinks, on average, do you consume in a week?

A. None
B. 1–3 cans
C. 4–6 cans
D. 7 or more cans



When energy	the amount of energy o rused, we gain weight	consumed t. Excess er	l is greater than the nergy is stored in the	amount of body as fat.
Energy in - Energy used = Energy stored The rol our inc	te at which we use ener dividual metabolism.	rgy varies	depending on how a	ctive we are, and c
Are your energy co	onsumption ar	nd act	ivity in balar	ice?
<ul> <li>Do you know what the n for a person of your age</li> <li>Do you think you are eat</li> <li>How do you think you co Islands?</li> </ul>	commended food and ing well and doing eno mpare with other teen following table to find	activity gi ugh physi agers in th out.	uidelines are cal activity? ee Cook	PHYSI
Outstan	Options	Your	What do you think the guidelines for health should be?	What do you thin a typical teenage should be doing eating?
Question				
How many servings of fruit (fresh, frazen or canned with no added sugar) do you eat on an average day?	A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
Construction     How many servings of fruit (fresh, frazen or canned with no added sugar) do you eat on an average day!     How many servings of wegetables (fresh, frazen or canned) do you eat on an overage day!	A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
<ul> <li>How many servings of fruit (fresh, frazen or canned with no added sugar) do you eat on an average doy?</li> <li>How many servings of vregetables (insh, frazen or canned) do you eat on an average, doy?</li> <li>How much time, on average, do you spend doing moderate to vigorous servise (e.g. brisk welfing) each day?</li> </ul>	A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings A. 0-30 minutes B. 30-60 minutes D. 60-90 minutes D. Over 90 minutes			

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## Are your energy consumption and activity in balance?

#### **Question 5**

How many days in an average week do you eat something for breakfast?

A. None
B. 1–2 days
C. 3–4 days
D. 5–6 days
E. Every morning







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## Are your energy consumption and activity in balance?

#### **Question 6**

Are you involved in growing vegetables at home or school?

A. Yes B. No



	When energy	the amount of energy o used, we gain weight	consumed 1. Excess er	l is greater than the nergy is stored in the	amount of body as fat.
	Energy in - Energy used - Energy stored - Energy stored	e at which we use ener lividual metabolism,	rgy varies	depending on how a	ctive we are, and a
Ar	e your energy co	onsumption ar	nd act	ivity in balar	ice?
- -	Do you know what the re for a person of your age Do you think you are eat How do you think you co Islands?	ing well and doing end ing well and doing end mpare with other teens	activity gi ugh physi ogers in th	cal activity? re Cook	PHYSI
Q	Jestion	Options	Your	What do you think the guidelines for health should be?	What do you this a typical teenag should be doing eating?
1.	How many servings of fruit (fresh, frazen or canned with no added	A. None B. 1-2 servings C. 3-4 servings			
	average day?	D. 5 or more servings			
2.	Average day? How many servings of vegetables (fresh, frazen or canned) do you eat on an average day?	D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings			
2.	and any too you serv on an average doy? How many servings of vegetables (fresh, frazen or canned) do you estand an average, do you spend doing moderate to vigorous exercise (s.g. brisk walking) each doy?	D. 5 or more servings A. None B. 1-2 servings C. 3-4 servings D. 5 or more servings A. 0-30 minutes B. 30-60 minutes C. 60-90 minutes D. Over 90 minutes			

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### **Recommendations for health**

#### **Recommendation 1**

Heath recommendations for 5 to 17 year-olds	NZ youth	Cook Islands young adults	Personal assessment or recommendation	
Eat at least 2 servings of fruit and at least 3 servings of vegetables each day	60% eat 2 servings of fruit 40% eat 3 servings of vegetables	18% eat 5+ a day		

#### Keeping in Balance!

Recommendations for Health

- The World Health Organization has recommendations for food and physical activity for people of different ages.
- The recommendations are based on evidence and are designed to support health and wellbeing.
- Research conducted in different countries explores the diet and lifestyle behaviours of people at different stages of life: childhood, adolescence, adults and older adults.

Compare your typical diet and lifestyle behaviours with the health recommendations and the research evidence about the typical behaviour of 12-18 year-old Coek kianders and 15-19 year-old New Zealanders. You may wish to record a personal assessment or goal for your personal diet and lifestyle. (This is not for your teacher or peers unless you want to there and discuss it).

Recommendations for health" 5-17 year-olds		Cook Islands: Behaviour of 12-18 year-olds**	New Zealand: Behaviour of 15-19 year-olds***	My personal assessment; and/or l personal goal for health	
ι	Eat at least two servings of fruit every day.	56% of young people eat at least two servings of fruit every day.	60% of young people eat at least two servings of fruit every day.		
2.	Eat at least three servings of vegetables every day.	31% of young people eat at least three servings of vegetables every day.	40% of young people eat at least three servings of vegetables every day.		
3.	Every day, do 60 minutes or more of moderate to vigorous physical activity.	20% of 12-18 year olds achieve the recommended 60 minutes of physical exercise every day.	The average 15-19 year old spends 46 minutes a day doing maderate to vigorous physical activity.		
4.	Limit sugary drinks (fizzy soft drinks, fruit drinks, energy and sports drinks and flavoured milk) to less than three servings per	60% of 12-18 year olds drink at least one carbonated soft drink every day.	11.5% of 15 to 19 year olds drink fizzy or soft drinks seven or more times a week. 3.7% had energy drinks five or more times energy		

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Keeping in Balance!

 The World Health Organization has recommendations for food and physical activity for people of different ages.

The recommendations are based on evidence and are designed to

Research conducted in different countries explores the diet and lifestyle behaviours of people at different stages of life: childhood,

**Recommendations for Health** 

support health and wellbeing.

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### **Recommendations for health**

#### **Recommendation 2**

recommendations For 5 to 17 year-olds		assessment or recommendation	your teacher or peers Recommendations for health" 5-17 year-olds 1. Eat at least two servings of fruit every day. 2. Eat at least three servings of	Unless you want to she Cook Islands: Behaviour of 12-18 year-olds** 56% of young people eat of least two serving of fruit every day. 31% of young	are and discuss it). New Zealand: Behaviour of 15-19 year-olds*** 60% of young people eat at least two tervings of full every day. 40% of young people and least	My personal assessment; and/or personal goal for health
Less than 2 hours of screen time	Only 30% meet the standard		vegetables every doy. 3. Every day, do 60 minutes or more of moderate to vigorous physical activity. 4. Limit sugary drink (futzy soft drinks, energy and sport drinks, and flovoured milk) to least than three servings per week.	three servings of vegetables every day. 20% of 12-18 year olds achieve the recommended 60 minutes of physical averdise every day. 60% of 12-18 year olds drink at least one carbonated soft- drink every day.	three servings of vegetables every day. The overage 15-19 year old spends 46 minutes a day daing moderate to octivity. 11.5% of 15 to 19 year old atrink flazy or soft drinks seven or more times a week.	
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#### **Recommendations for health**

#### **Recommendation 3**

Heath recommendations for 5 to 17 year-olds	NZ youth	Cook Islands young adults	Personal assessment or recommendation
60 minutes of	Average 46	Average 46	
exercise daily	minutes	minutes	

#### Keeping in Balance!

Recommendations for Health

- The World Health Organization has recommendations for food and physical activity for people of different ages.
- The recommendations are based on evidence and are designed to support health and wellbeing.
- Research conducted in different countries explores the diet and lifestyle behaviours of people at different stages of life: childhood, adolescence, adults and older adults.

Compare your typical diet and lifestyle behaviours with the health recommendations and the research evidence about the typical behaviour of 12-18 year-old Cook klannders and 15-19 year-old New Zealanders. You may wish to record a personal assessment or goal for your personal diet and lifestyle. (This is not for your teacher or peers unless you want to share and discuss it).

Rec for 5-1	commendations health" 7 year-olds	Cook Islands: Behaviour of 12-18 year-olds**	New Zealand: Behaviour of 15-19 year-olds***	My personal assessment; and/or My personal goal for health
ı	Eat at least two servings of fruit every day.	56% of young people eat at least two servings of fruit every day.	60% of young people eat at least two servings of fruit every day.	
2.	Eat at least three servings of vegetables every day.	31% of young people eat at least three servings of vegetables every day.	40% of young people eat at least three servings of vegetables every day.	
3.	Every day, do 60 minutes or more of moderate to vigorous physical activity.	20% of 12-18 year olds achieve the recommended 60 minutes of physical exercise every day.	The average 15-19 year old spends 46 minutes a day doing moderate to vigorous physical activity.	
4.	Limit sugary drinks (fizzy soft drinks, fruit drinks, energy and sports drinks and flavoured milk) to less than three servings per weak	60% of 12-18 year olds drink at least one carbonated soft drink every day.	11.5% of 15 to 19 year olds drink fizzy or soft drinks seven or more times a week. 3.7% had energy drinks five or more times a week	

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#### **Recommendations for health**

#### **Recommendation 4**



Heath recommendations for 5 to 17 year-olds	NZ youth	Personal assessment or recommendation
Less than 1 serving per week of sugar sweetened drinks	11.5% drink regular fizzy or soft drinks 7 or more times a week	
	3.7% had energy drinks 5 or more times a week	



 
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 \*\*Neekh recommendations are from the World Health Organization \*\* Cook liakons data taken from the Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (bloch Health survey 2010. Coek islands Minizey of Health. Cook liakons (colour) Clinical Trials Besearch that, University of Acadiana A national survey of children and young people Sphysical ac and dietary behaviours in New Zarland: 2000/09. Bir (findings. Auxikand. University of Auxikand. 2010. To Malk Tak Yene (Tak) C 12 L Maramentar Teals In Teacht

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### **Recommendations for health**

#### **Recommendation 5**

Heath recommendations for 5 to 17 year-olds	NZ youth	Personal assessment or recommendation
Eat breakfast every day	67.5% usually eat something for breakfast 5 or more times a week	

#### Keeping in Balance!

Recommendations for Health

- The World Health Organization has recommendations for food and physical activity for people of different ages.
- The recommendations are based on evidence and are designed to support health and wellbeing.
- Research conducted in different countries explores the diet and lifestyle behaviours of people at different stages of life: childhood, adolescence, adults and older adults.

Compare your typical diet and lifestyle behaviours with the health recommendations and the research evidence about the typical behaviour of 12-18 year-old Cook klannders and 15-19 year-old New Zealanders. You may wish to record a personal assessment or goal for your personal diet and lifestyle. (This is not for your teacher or peers unless you want to share and discuss it).

Recomme for health 5-17 year-	ndations olds	Cook Islands: Behaviour of 12-18 year-olds**	New Zealand: Behaviour of 15-19 year-olds***	My personal assessment; and/or My personal goal for health
1. Eat at serving every o	least two gs of fruit Say,	56% of young people eat at least two servings of fruit every day.	60% of young people eat at least two servings of fruit every day.	
<ol> <li>Eat at three s vegeto day.</li> </ol>	least ervings of bles every	31% of young people eat at least three servings of vegetables every day.	40% of young people eat at least three servings of vegetables every day.	
<ol> <li>Every of minute of mod vigoroi activity</li> </ol>	day, do 60 is or more lerate to us physical 7.	20% of 12-18 year olds achieve the recommended 60 minutes of physical exercise every day.	The average 15-19 year old spends 46 minutes a day doing maderate to vigorous physical activity.	
<ol> <li>Limits (fizzy s fruit de and sp and flo milk) to three s weak.</li> </ol>	ugary drinks oft drinks, inks, energy orts drinks woured o less than ervings per	60% of 12-18 year olds drink at least one carbonated soft drink every day.	11.5% of 15 to 19 year olds drink fizzy or soft drinks seven or more times a week. 3.7% had energy drinks five or more times a week.	

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#### Keeping in Balance! 12

SR CPO

SLR 18

### **Recommendations for health**

Recom	mend	lation	6

Heath recommendations for 5 to 17 year-olds	NZ youth	Personal assessment or recommendation	
Help with growing food, food shopping and cooking	48% of 15 to 19 year- olds were involved in growing vegetables at home or school.		
	Of those involved, nearly 93% ate these vegetables		~

#### SLR 18 Keeping in Balance! **Recommendations for Health** · The World Health Organization has recommendations for food and physical activity for people of different ages. · The recommendations are based on evidence and are designed to support health and wellbeing. Research conducted in different countries explores the diet and lifestyle behaviours of people at different stages of life: childhood, adolescence, adults and older adults. Compare your typical diet and lifestyle behaviours with the health recommendations and the research evidence about the typical behaviour of 12-18 year-old Cook Islanders and 15-19 year-old New Zealanders. You may wish to record a personal assessment or goal for your personal diet and lifestyle. (This is not for your teacher or peers unless you want to share and discuss it). Cook Islands Recommendation New Zealand My personal assessment personal goal for health Behaviour of 12-18 Behaviour of 15-19 for health year-olds"" 5-17 year-olds ar-olds" 55% of young people eat at least two eat at least two Eat at least two servings of fruit ervings of fruit every servings of fruit every every day. day. Eat at least 31% of young 40% of young three servings of people eat at least people eat at least vegetables every ree servings of three servings of

	ooy.	vegetables every day.	vegetables every day.	
3.	Every day, do 60 minutes or more of moderate to vigorous physical activity.	20% of 12-18 year olds achieve the recommended 60 minutes of physical exercise every day.	The overage 15-19 year old spends 46 minutes a day doing moderate to vigorous physical activity.	
4.	Limit sugary drinks (fizzy soft drinks, fruit drinks, energy and sports drinks and flavoured milk) to less than three servings per	60% of 12-18 year olds drink at least one carbonated soft drink every day.	11.5% of 15 to 19 year olds drink fizzy or soft drinks seven or more times a week. 3.7% had energy drinks five or more	

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#### **Exploring Risk**

СРО

**SLR 19** 

Injury risk (per 100 people) for 10 to 19 year-olds in New Zealand for the period June 2010 to July 2011

	Activity	10–14 year-olds	15–19 year-olds	10–19 year-olds
	Touch rugby	0.6	0.7	0.6
	Netball	1.7	1.4	1.5
	Rugby	2.8	4.8	3.9
	Soccer	1.9	2.0	1.9
	Cycling	1.0	0.6	0.8
	Scooter	0.3	0.0	0.2
	Skateboarding	0.6	0.8	0.7
	Driving related	0.6	1.0	0.8



Data retrieved from ACC Injury Statistics Tool and Statistics New Zealand—National Population Estimates: June 2011 quarter

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End of 'Exploring Risk', take me back to the contents page

#### **Exploring Risk: Type 2 Diabetes**

SR CPO





Individual 1 Lifestyle: Poor diet, does little exercise. Family situation: Small, high income family with a history of diabetes. Doing well at school.



Individual 2 Lifestyle: Very active, good diet. Family situation: Small, low income family. No history of diabetes. Doing well at school.



Individual 3 Lifestyle: Moderate activity levels, good diet, smoker. Family situation: Large, low income family. Achieving well at school.

Individual 4 Lifestyle: Moderate activity, poor diet. Family situation: Small, family with a good income. Underachieving at school.



Individual X Lifestyle: Very good diet. Does lots of exercise. Family situation: Small family with a high income. Doing well at school.





Data retrieved from ACC Injury Statistics Tool and Statistics New Zealand—National Population Estimates: June 2011

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