

Promoting physical activity in Pacific Island communities

Workshop workbook



GET ACTIVE!



Promoting physical activity in Pacific Island communities

Workshop workbook

By

Secretariat of the Pacific Community and Russell Consulting International



Noumea, New Caledonia, 2010

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Introduction

This workbook has been developed to support the participants who have previously attended SPC workshops. It is also hoped that this workbook could be used with the manual to support in-country training and as a general reference for those interested in learning more about physical activity.

In order to promote physical activity for ourselves and for others, we need to know some of the basics: what is the relationship between physical activity and health? What is physical activity and how can it fit into our everyday lives? How much do I need to do to gain health benefits? How do I know if I am getting enough physical activity? How can I encourage people to be more active and to stay more active?

This workbook provides activities designed to help develop understanding and be enjoyable. It should be used in conjunction with the manual. Physical activity should be fun, and we hope that this workbook promotes this message.

Each task identified in the accompanying workshop manual is outlined with full descriptions and instructions for completing the task and, where appropriate, reporting back to the workshop.

Each task is set out as follows:

- Aim(s) of the session
- Task number and title
- Purpose of the task
- Terms from the session that are important in understanding and completing the task
- Organisation of the workshop for the task
- Task description

Score or recording sheets are provided where required

At the end of the workshop, your work in completing these tasks will give you the knowledge and experience necessary to maintain (or embark on) an active lifestyle. More importantly you will be prepared to take a lead role in your home community in encouraging and facilitating others to do the same.

Acknowledgements

The workbook has been prepared to supplement the Promoting physical activity in Pacific Island communities workshop manual. It developed from the three workshops conducted by the Secretariat of the Pacific Community in Nadi, Fiji Islands in 2004 and 2005.

We would like to acknowledge the effort and dedication from Professor David Russell in developing the regional training workshops, the manual and this workbook. Additionally the input of various reviewers and the workshop participants has been invaluable.

Session 1: Introduction to physical activity and health

There is no task for this session

Session 2: Basic concepts of physical activity

Aims of session:

- To achieve an understanding of the basic concepts of physical activity and physical fitness and the difference between health- and performance-related physical fitness
- To understand the practical implications of the use of the formal technical descriptions of these terms in the context of public health promotion



Task 2.1 Physical activity terminology

Purpose:

To use and become familiar with some basic physical activity terminology

Terms:

- Physical activity
- Exercise
- Physical fitness
- Household activities
- Employment activities
- Leisure activities

Organisation:

Work in small groups of three or four.

Task:

This task is designed to introduce the basic concepts of physical activity. You will consider your own current capacity for physical activity and learn how to assess your capacity to perform certain tasks.

1. First, each person completes this questionnaire.

If you had to, how long could you ...	1–2 min.	10 min.	30 min.	1 hr.	A few hrs.	All day
... run or jog fast?						
... jog slowly?						
... walk fast?						
... dig the taro patch/garden?						
... cut grass with a weed-whacker/trimmer?						
... 'potter around' in your garden?						

- 2a. Identify four everyday activities in one of the following areas: housework, employment-related or leisure time.
- 2b. Now decide, and be prepared to discuss, whether you think your own current state of physical fitness would allow you to perform the tasks without discomfort.

Group discussion

Everyone will share at least one activity with the whole group and whether they feel they could easily do it or not.

Note the following points:

- We are interested in all activity, including walking to the bus, doing work in the house and the yard, playing with children, sports, and exercise classes. The questions we ask must produce information on *all* physical activity so we can get a full picture of an individual's, a group's or a population's physical activity levels.
- We are also interested in how long they are active and the intensity level (*more on this later*).

Note: We need to be aware that people may not always give completely accurate information, usually because they have trouble remembering.

Session 3: Physical activity components

Aim of session:

- To review different components of physical activity: aerobic, strength, flexibility



Task 3.1 Endurance, strength, balance and flexibility activities

Purpose:

To experience and become familiar with some simple physical activities designed to enhance endurance, strength, balance and flexibility

Terms:

- Endurance
- Strength
- Balance
- Flexibility

Organisation:

Your facilitator will assign you to one of four groups. Each group will work through the endurance, strength, balance or flexibility exercises detailed in appendix 8 of the main manual.

Task:

1. Work through each example for your area. Make sure that you understand the activities (ask your facilitator if you don't). And be aware of safety issues.
2. In pairs, perform the first activity until you both feel comfortable – that is, able to do it properly and safely.
3. Repeat this until you have done all the activities.
4. You should:
 - be able to perform each activity correctly;
 - know any safety issues for each activity; and
 - know what effect the activity has on your fitness.
5. You should now be prepared to demonstrate your activities and take the other workshop members through them all.

Your facilitator will organise time for each group to present to the rest of the workshop, with everyone having the opportunity to undertake the exercises at the same time.

Session 4: Assessing physical activity levels

Aim of session:

- To achieve a basic understanding of physical activity measurement, and the interpretation of physical activity data



Task 4.1 Interpreting physical activity data from a national survey

Purpose:

To understand how physical activity survey data are obtained, and to be able to adequately interpret them

Terms:

- Sedentary
- Physically inactive
- Relatively active
- Highly active
- Leisure activity
- Sport
- Frequency
- Duration
- Intensity

Organisation:

You will work in small groups of three or four people.

Task:

- Read the table below (Activity levels of Pacific peoples [1996 New Zealand Health Survey])

Results:

Physically inactive	Relatively active	Highly active
42%	22%	36%

- Read how the survey determined who was physically inactive, relatively active and highly active. You will need to read and understand exactly how physical activity was measured in the questionnaire.

Physically inactive:

Sedentary – no sports/activities in the last seven days ... **plus...**

Relatively inactive – took part in less than 2.5 hours of leisure time physical activity in the last seven days

Relatively active:

Took part in more than 2.5 but less than 5 hours of leisure-time physical activity in the last seven days

Highly active:

Took part in 5 hours or more of leisure time physical activity in the last seven days

- Answer the following questions:

- Were all the people labelled *physically inactive* really physically inactive?
- Could some of the people labelled *relatively active* be *highly active*?

You must have reasons for your answers!

- Your facilitator will lead a discussion on these questions with the workshop, drawing on any local data on physical activity levels and how they were collected.

Session 5: Assessing physical activity intensity

Aim of session:

- To experience with different ways of assessing physical activity intensity



Task 5.1 Metabolic units

Purpose:

To help you become familiar with the concept of METs or the metabolic equivalents of everyday activities such as gardening, office work or walking

Terms:

- MET
- Aerobic

Organisation:

Work in pairs.

Task:

- Identify two aerobic activities from each of these categories: occupational, housework/gardening, leisure/recreational.
- Discuss why you classify them as aerobic.
- Determine the MET value of each activity you have identified from your [workshop manual](#) (Session 5). If you cannot find one of your activities estimate its MET value by matching it with one that you think is similar.

MET values of selected aerobic activities

Activity type	Activity	MET value
Occupational		
Occupational		
Household/gardening		
Household/gardening		
Leisure/recreational		
Leisure/recreational		



Task 5.2 Breathing and talk tests

Purpose:

To learn to monitor an activity's intensity while performing it

Terms:

- Light intensity
- Moderate intensity
- Vigorous intensity

Organisation:

You will work in pairs.

Task:

You will walk a given circuit slowly, applying the breath and talk tests during and on completing the circuit.

Now, walk the circuit again, this time at a brisk pace, again applying the breath and talk tests during the circuit.

Note: This task can be done during the pre-lunch activity session.



Task 5.3

Target heart rate and rate of perceived exertion

Purpose:

To learn to monitor activity intensity using target heart rate (THR) and rate of perceived exertion (RPE)

Terms:

- Heart rate
- Pulse
- Maximum heart rate
- Moderate intensity target heart rate ($THR_{(Moderate)}$)
- Vigorous intensity target heart rate ($THR_{(Vigorous)}$)
- Perceived exertion
- Intensity rating

Organisation:

Work in pairs.

Task:

In this task you will walk a given circuit at a brisk pace while rating your perceived exertion (using the Borg scale). You will also take and record your pulse. You will compare the intensity rating of the walk from these two measures.

Take your RPE and heart rate *halfway around* the circuit and *at the end* of the circuit.

Refer to Appendix 3 in the [manual](#) for details on how to do these. Also note that the ratings can be related to light, moderate and vigorous intensity activity as shown in the table below.

Rating	Intensity
7–11	Light
12–14	Moderate
15–19	Vigorous

Location	RPE	Heart rate (bpm)*
Halfway		
End of circuit		

* Beats per minute

Session 6: Assessing physical fitness components and body composition

Aim of session:

- To become familiar with the assessment of physical fitness components and body composition



Task 6.1 Assessing physical fitness

Purpose:

To become familiar with simple tests of physical fitness

Terms:

- Heart rate
- Cardiovascular
- Cardiorespiratory
- Aerobic activity
- Flexibility

Organisation:

The facilitator will first demonstrate each test. Then you will be grouped in pairs and one person will perform the test, with the other person being the tester. Then you will change roles.

Be sure to record the results carefully for your partner.

Tasks

1. Step test

i. Equipment

- One timepiece with a second hand
- Two steps or stairs (i.e. two risers and treads) – you **must** use the same steps every time you do this

ii. Procedure

- a. Take and record resting heart rate
- b. Step up and down the steps for a set period at a set rate (see figure below)
- c. Take post-stepping heart rates at intervals

a. Take and record resting heart rate

The test should be done after sitting quietly for a few minutes. The purpose of this is to measure your resting heart rate (RHR) as the base line.

- Find the pulse (either radial or carotid artery).
- Count the number of beats for 30 seconds (see Appendix 3 in your manual).
- Record the heart rate.

b. Step up and down the steps

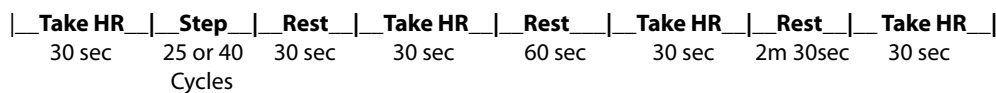
Perform the eight-step cadence described in the figure below at the rate of about one second per step for 25 or 40 cycles (25 cycles if you have consider your lifestyle to be inactive and are just starting to exercise; 40 cycles if your lifestyle is at least reasonably active).

c. Take post-stepping heart rates at intervals

When you have finished immediately sit down on the steps and take your heart rate for 30 seconds as follows:

- 30 seconds after sitting down
- 2 min. after sitting down (*one minute* later)
- 5 min. after sitting down (*two-and-a-half minutes* later)

Here is a timeline that explains when to take your heart rate:



Enter your partner's heart rates in the table.



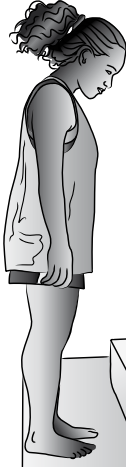
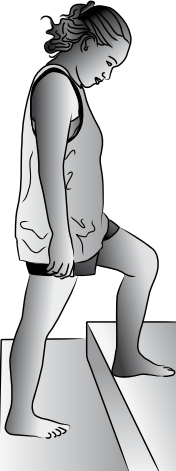
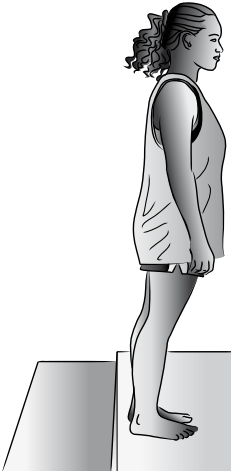
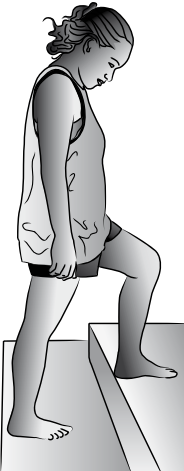
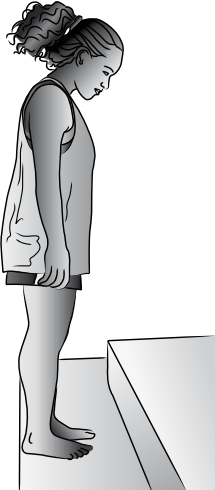


Remember to keep the proper time! Don't be distracted!

Step test score sheet

Date:	27/11									
Heart rate (bpm)	Example	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9
Resting*	(36) 72									
30 sec.**	(62) 124									
2 min.**	(52) 104									
5 min.**	(42) 84									

* before your partner starts stepping; ** after your partner finishes stepping; number in parentheses is heart rate taken over 30 sec.

The step test

		
Ready! Stand facing the steps	1. Step up with left foot	2. Step up with right foot
		
3. Step up with left foot	4. To top step with right foot	5. Step down with right foot
		
6. Step down with left foot	7. Step down with right foot	8. Step down with left foot

2. Strength tests

I. Curl-up (abdominal muscles)

i. **Equipment**

None

ii. **Procedure**

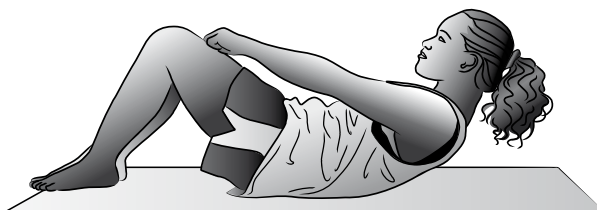
This test can be done at two different levels. Start with **Level 1**. If you can manage this comfortably, then try **Level 2**.

- a. Lie on your back, legs bent at right angles, feet flat on the floor, palms on your thighs (*position a*).



Position a

- b. **Level 1** – Slide your palms down your thighs towards your knees only until your shoulders are off the ground. This is position b. Hold for two seconds then lower your palms to go back to position a. Repeat as many times as you can without stopping (see the counting sequence below).



Position b

- c. **Level 2** – Slide your hands down your thighs until your palms are on your kneecaps. This is position c. Keep your palms on your knees for two seconds, then slide your palms up your thighs back to position a. Counting sequence: ready (*position a*), and slide, two, three (*position b*), and hold, and down, two, three, and hold, and slide, two, three ...



Position c

iii. **Scoring**

Simply count the number of times you can raise your shoulders off the ground (*position b*) or reach your knees (*position c*).

Remember, always do the exercise the same way!

Record the number of curl-ups you do in the score sheet below.

II. Push-up (shoulder muscles)

This test can be done in two ways – if you do not feel you can manage a ‘normal’ push-up (and most of us cannot!), try the modified push-up described first. We refer to this option as ‘level 1’. These are described in the Procedure section below.

If you feel you can manage one or more full push-ups, then try the ‘level 2’ option.

i. Equipment

None

ii. Procedure

First, try the partial push-up (level 1), then the full push-up (level 2)

a. Level I – Partial push-up



Position 1

Position 1 – Lie on your stomach with your toes curled under, knees on the ground, and hands palms down under your shoulders.



Position 2

Position 2 – Push down on your hands to raise your upper body off the ground. Your knees remain on the ground.



Position 3

Position 3 – Hold this position for two seconds, then lower your body to the ground.

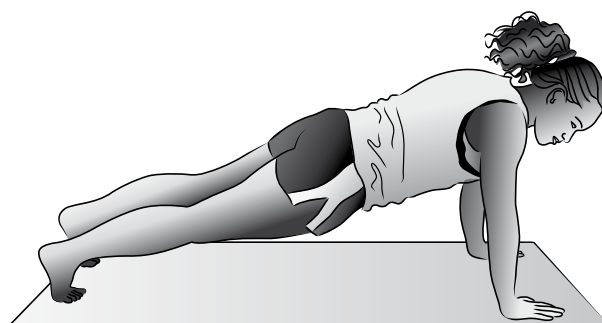
That is a level 1 push-up!

Repeat as many times as you can.

Enter the number of completed level 1 push-ups in the score sheet below.

b. Level 2 – Full push-up

Position 1 – Same as for level 2



Position 2

Position 2 – This is the same as for level 1, but keeps your body straight. Push on your hands to raise your body off the ground (including your knees) until your arms are straight. Keep your body straight.

Position 3 – Same as for level 1

Strength score sheet

Date								
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
Sit-up								
Level 1								
Level 2								
Push-up								
Level 1								
Level 2								

3. Flexibility tests

I. Hip flexors

i. **Equipment**

Tape measure

ii. **Procedure**

a. Sit on the floor, legs straight. With your straight arms and your fingers extended, place your fingertips on your thighs or knees (whichever is the most comfortable) (position a). Place the tape measure between your legs, extending down towards your feet, with the 0 cm mark at your knees.



Position a

b. Slide your fingertips along the floor on either side of the measuring tape towards your ankles, keeping your legs straight (*position b*).



Position b

Slide slowly to reach as far as you can towards your ankles. Do not bounce forward – just slide your fingertips slowly along the ground.

Do not do this test unless you have warmed up.

iii. **Scoring**

Repeat the test three times and note how far you reached on the measuring tape on your best attempt.

Remember, always do this exercise the same way!

II. Shoulder flexibility

i. **Equipment**

Measuring tape

ii. **Procedure**

- a. To test the left shoulder: stand with your right arm straight up, then let your right elbow bend so your palm rests between your shoulder blades. Let your left arm hang down by your thigh. Then, with your palm facing back, bend your elbow and reach up your back, trying to touch the fingers of your left hand.



- b. To test the right shoulder repeat step a with your left arm up and your right hand down.

iii. **Scoring**

Ask your partner to measure the distance between your finger tips in centimetres (or how far you fingertips overlap).

Flexibility score sheet

Date	29 Nov								
	Example	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
Sit and reach	27cm								
Shoulder									
Right shoulder	-5 cm*								
Left shoulder	+1cm**								

* -5cm means the participant's fingertips were 5 cm apart.

** +1cm means that the participant's fingertips overlapped by 1cm.



Task 6.2 Estimating body composition

Purpose:

To experience and become familiar with basic anthropometric measures related to body composition

Terms:

- Height
- Weight
- Waist/Hip Ratio (WHR)

Organisation:

The facilitator will first demonstrate each test. Then, in pairs, one person will be the tester, measuring the other person. Then you will change roles.

Be sure to record the results carefully for your partner.

1. Height

i. Equipment

- Measuring tape
- *Bluetac* or similar (to attach the tape to the wall)
- Set square or similar (e.g. book)

Attach the tape measure vertically to the wall with the 0 cm mark at floor level.

ii. Procedure

Subject

- Remove footwear.
- Stand with heels, buttocks, shoulders and back of your head against the wall.
- Hold your head straight and look directly forward.

Measurer

- Place the set square (or spine of the book) against the tape.
- Ask the subject to "stand as tall as you can".
- Slide it down the tape until it rests lightly in the top of the subject's head.
- Read the tape at the bottom of the set square (or book) to the nearest millimetre.
- Enter the height in the score sheet below

2. Weight

i. Equipment

Scale (kilogram)

Place the scales on a firm surface.

ii. Procedure

Subject

- Dress in light clothes and take off any footwear.
- Stand on the scale.

Measurer

- Read the weight from directly above the scale to the nearest 0.5 kg.
- Record this weight in the score sheet below.

Note: Always wear similar clothing when being weighed

3. Now calculate your body mass index (BMI)

i. **Equipment**

- BMI chart, or
- Calculator

ii. **Procedure**

- Using chart
- Using calculator

Example:

Height: 1.60 m

Weight: 75.5 kg

$$\begin{aligned} \text{BMI} &= \text{weight} \div (\text{height} \times \text{height}) \\ &= 75.5 \div (1.60 \times 1.60) \\ &= 75.5 \div (2.56) \\ &= 29.5 \end{aligned}$$

This person is considered overweight, but not obese (see footnote).

Your BMI = ____ kg \div ____ m \times ____ m

Enter your BMI in the score sheet below.

= ____

4. Waist circumference

i. **Equipment**

Measuring tape (centimetre)

ii. **Procedure**

Subject

- Dress in a light t-shirt.
- Stand relaxed, breathing quietly.

Measurer

- Place the tape around the waist.
- Identify the minimum circumference between the lowest rib and the iliac crest (top of the hip bone).
- Read the circumference to the nearest millimetre.
- Record the circumference in the score sheet below.

5. Hip circumference

i. **Equipment**

Measuring tape (centimetre)

ii. **Procedure**

Subject

- Dress in lightweight shorts or trousers.
- Stand relaxed, feet together, breathing quietly.

Measurer

- Squat down at the side of your partner.
- Identify the maximum extension of the buttocks.
- Place the tape around the hips under the upper garment (e.g. t-shirt) horizontally.
- Read the circumference to the nearest millimetre.
- Record the circumference in the score sheet below.

6. Waist/hip ratio

i. **Equipment**

Calculator

ii. **Procedure**

Example:

Waist circumference = 97.5 cm

Hip circumference = 102.5 cm

$$\begin{aligned}\text{Waist/hip ratio (WHR)} &= \text{Waist circumference} \div \text{hip circumference} \\ &= 97.5 \div 102.5 \\ &= .95\end{aligned}$$

Enter the WHR in the score sheet below

iii. **Interpretation**

The recommended WHR maximum for women is 0.8 or less. For men, the recommended WHR is 0.95 or less. So this male participant is just ok!

Note that while some groups recommend a specific ideal waist circumference – less than 94 cm (37 inches) for men and less than 80 cm (32 inches) for women – we recommend that you measure your own waist circumference and set yourself a SMART goal to reduce it.

As a guide, you should consider reducing your weight if your BMI is over 26. A BMI of more than 26 means that you are likely to be overweight i.e. a bit too heavy for your height. If your BMI is over 32, then you should be seriously trying to reduce your weight. (For Polynesian people, a BMI over 32 is the cut-off point for obesity).

Date								
	Example	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7
Height (m)	1.6							
Weight (kg)	75.5							
BMI	29.5							
Waist circum. (cm)	97							
Hip circum. (cm)	105							
WHR	.95							

7. Now, based on this information (BMI, WHR) what advice would you give your partner?

Session 7: Safety considerations

There is no task for this session

Session 8: Barriers to physical activity

Aim of session:

- To understand the characteristics of physically inactive people and to identify and understand the likely reasons why people are inactive



Task 8.1 Barriers to physical activity

Purpose:

To determine and understand the reasons why people are physically inactive and to consider ways of overcoming these reasons

Terms:

- Personal factors
- Environmental factors
- Cultural factors
- Physical activity determinants

Organisation:

You will work in small discussion groups of three or four.

Task:

1. Identify and discuss up to 10 possible reasons why people in your country may not be active. Consider these categories:
 - personal reasons
 - environmental reasons
 - cultural reasons
1. Discuss possible ways of removing these barriers.
2. One person will act as rapporteur for your group to report to the workshop.

Use the chart below to record your deliberations

Barrier category	Barrier	Solution
Personal		
Environmental		
Cultural		

Session 9: Motivation

Aims of session:

- To appreciate some factors that affect persistence in physical activity behaviours
- To become familiar with some basic motivational techniques



Task 9.1 Why people are active (or inactive)

Purpose:

To identify and discuss personal experiences of motivating factors for physical activity

Terms:

- Positive reinforcement
- Rewards
- Goal setting
- Self monitoring

Organisation:

You will work in small discussion groups of three or four.

Task:

Consider and discuss personal experiences of motivating factors for physical activity.

1. Honestly assess whether you meet the recommended guidelines for physical activity (refer to Session 11 in your manual).
2. Identify up to four reasons why you are either:
 - a. motivated to be physically active (meet the guidelines); or
 - b. motivated to be physically inactive (not meet the guidelines).
3. How does each of these factors influence your physical activity behaviour?
4. One person will act as rapporteur for your group to report to the workshop.

Use the chart below to record your deliberations

**delete one*

I do/do not* meet the recommended physical activity guidelines.

Reasons	Influence on my physical activity behaviour
1.	
2.	
3.	
4.	



Task 9.2 Commitment¹ to be physically active

Purpose:

To understand the concept and role of commitment in the maintenance of physically activity

Terms:

- Commitment
- Enjoyment
- Other priorities
- Social constraints
- Social support
- Valuable opportunities
- Personal investments

Organisation:

Find a partner – one person interviews the other. Then change partners so that you are interviewing (or being interviewed by) another person. This will keep you from being unduly influenced by the first interview.

Task:

1. One person administers the *commitment* interview questionnaire (see below). This should help you both get a feel for the factors that contribute to the interviewee's commitment to being physically active. After asking each question, give your partner time to think about their answer: don't hurry them.
2. Read the definition of *commitment* and make sure your partner understands what it means.
3. For each of these commitment factors:
 - Read the definition (e.g. *enjoyment: The feelings of pleasure, liking or loving the experience of being physically active*).
 - Ask each question listed.

The interview should take about half an hour.

When you have finished interviewing each other, we will collate the answers to see what factors seem important to maintaining the commitment to keeping physically active after our workshop!

Note: The second interview may have to be done outside the normal workshop sessions.

According to research, commitment to any activity, organisation or person is strengthened or weakened by the following factors:

- physical activity enjoyment
- valuable opportunities
- other priorities in your life
- personal investments
- social constraints (expectations of other people to stay active)
- social support

Physical activity enjoyment

The feelings of pleasure, liking or loving the experience of being physically active.

¹ For background reading see Scanlan TK, Russell DG, Wilson, NC & Scanlan, LA. (2003). Project on elite athlete performance (PEAK): I introduction and methodology. *J Sport & Exercise Psychology*, 25(3) 360–376.

Valuable opportunities

Things or experiences that you get from being active or things or experiences that you would miss if you became inactive.

Other priorities in your life

Other things or responsibilities that make it difficult to stay physically active.

Personal investments

The things that you have put into (invested in) being physically active that you would lose if you became inactive. This could include such things as time, effort or money.

Social constraints (*Expectations of other people to stay active*)

The feelings you get about the opinions of others who expect you to remain active.

Social support

The encouragement and support you feel you get from others that help you remain physically active.

1. Read the definition of commitment to your partner and make sure they understand what it means:

Commitment: The desire and determination to remain physically active

2. Now administer the questionnaire.

Commitment factor	Question and answer
Enjoyment:	<p>1. Do you feel that enjoyment has any effect on your commitment to being physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>(If 'no' go to Valuable opportunities)</p>
	<p>2. Does it strengthen or weaken your commitment to being physically active?</p> <p>Strengthens it <input type="checkbox"/></p> <p>Weakens it <input type="checkbox"/></p>
Valuable opportunities:	<p>1. Are there any valuable opportunities you would miss if you stopped being active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>If 'yes': What valuable opportunities? (If 'no' go to Other priorities)</p>

	<p>2. Do you feel that losing these valuable opportunities would have any effect on your commitment to being physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>(If 'no' go to Other priorities)</p>
	<p>3. Does this strengthen or weaken your commitment to being physically active?</p> <p>Strengthens it <input type="checkbox"/></p> <p>Weakens it <input type="checkbox"/></p>

Commitment factor	Question and answer
Other priorities in your life:	<p>1. Do you have other priorities in your life that makes staying physically active difficult or impossible?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>If 'yes': What other priorities do you have? (If 'no' go to valuable Opportunities)</p>
	<p>2. Do you feel that other priorities in your life have any effect on your commitment to being physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>(If 'no' go to Valuable opportunities)</p>
	<p>3. Do these other priorities strengthen or weaken your commitment to being physically active?</p> <p>Strengthen it <input type="checkbox"/></p> <p>Weaken it <input type="checkbox"/></p>
Personal investments:	<p>1. Have you made any personal investments that you would lose if you became physically inactive?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>If 'yes': What personal investments have you made to be physically active? (If 'no' go to Expectation of others)</p>

	<p>2. Do you feel that these personal investments in your life have any effect on your commitment to being physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>(If 'no' go to Expectation of others)</p>
	<p>3. Does this strengthen or weaken your commitment to being physically active?</p> <p>Strengthens it <input type="checkbox"/></p> <p>Weakens it <input type="checkbox"/></p>

Commitment factor	Question and answer
Expectations of others:	<p>1. Do you feel the expectations of others have any effect on your commitment to being physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p> <p>(If 'no' go to Social support)</p>
	2. Whose expectations do you feel?
	<p>3. Do their expectations strengthen or weaken your commitment to being physically active?</p> <p>Strengthen it <input type="checkbox"/></p> <p>Weaken it <input type="checkbox"/></p>

Social support:	<p>1. Do you feel other people's support for you to be physically active?</p> <p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p>
	2. Whose support do you feel?
	<p>3. Does their support strengthen or weaken your commitment to being physically active?</p> <p>Strengthens it <input type="checkbox"/></p> <p>Weakens it <input type="checkbox"/></p>

Session 10: Principles of physical activity programme design

Aims of session:

- To increase the skills and knowledge of the participants in designing physical activity programmes for individuals and groups
- To be familiar with the concepts of frequency, duration and intensity of physical activity and be able to take these into account in the design of a physical activity programme
- To understand the methods of estimating the energy demands of different levels of physical activity
- To be capable of incorporating all these principles into the design of a physical activity programme



Task 10.1 Designing an individual programme

Purpose:

To learn the process of designing a physical activity programme for an individual

Terms:

- Intensity
- Duration
- Frequency
- SMART goals

Organisation:

For this task you will begin by working in pairs.

Task

This task brings you to the essence of the workshop: to design an individual programme for another person (or for yourself). It combines all the things you have learned so far in the workshop. Refer to earlier sections of the workshop manual and/or this workbook, or ask your facilitator if you need any help.

1. Assess current physical activity.
Using the Individual activity programmes table ([Document 4](#)), determine your own current activity profile. This form asks for information about:
 - what activity you perform;
 - how hard (intensity);
 - how often; and
 - for how long.
2. Discuss your activities with your partner.
 - Do they cover the range of health-related physical components?
 - Did your level of activity surprise you? What components of health-related fitness were lacking?
3. Assess your partner's activities.
 - Do they cover all health-related areas?
 - Assess the frequency, duration and intensity of each activity.
 - Do they meet the recommended guidelines for physical activity?
4. Determine your partner's physical activity preferences (e.g. walking, tennis, gardening).
5. Taking into account their current level of activity and their physical activity preferences, develop a tailored programme for your partner that will enable them to increase their activity level. This will be based on a realistic interpretation of your partner's current activity (SMART goals) and will help them reach the minimum recommended physical activity guidelines.

When you have both done this, each workshop participant will have a personal physical activity programme that they can try to follow after the workshop.



Task 10.2 Designing a group physical activity programme

Purpose:

To learn the process of designing a group physical activity programme

Terms:

- Intensity
- Duration
- Frequency
- SMART goals

Organisation:

For this task you begin by working in groups of 4–6 people.

Task:

This task brings you to the essence of the workshop. In Task 10.1 you learned to design a programme for an individual. Now we move to group programmes. Refer to earlier sections of the [workshop manual](#) and/or this workbook, or ask your facilitator if you need any help.

1. Review each group member's individual programme as developed in Task 10.1, then:
 - identify common goals;
 - identify common activities an/or commonly agreed activities;
 - develop a group activity programme;
 - develop a monitoring programme for the group; and
 - arrange a group mentoring programme that will provide support to each member.
2. Prepare one sample activity session based on Step 1 above and have one person try it out with your group.
3. Prepare a sample session that demonstrates your programme and prepare a brief presentation that illustrates the monitoring and mentoring aspects of your programme.
4. Each group will present its plan to the main group and then conduct an activity session for them (e.g. if one of your weekly activities was a buddy walk, the whole group should participate in this). Participants will need several sessions to complete this group task and should be able to work on it over the next day.

Session 11: Physical activity guidelines

Aims of session:

- To be aware of differing physical activity guidelines over time and internationally
- To become familiar with the 'Pacific Physical Activity Guidelines for Adults'
- To discuss the importance of policy and strategies for the promotion of physical activity



Task 11.1

Guidelines and strategy for your country

Purpose:

To become familiar with internationally recognised levels of health-beneficial physical activity and to be able to interpret them in the home-country context

Terms:

- Guidelines
- Strategy

Organisation:

You will work in small discussion groups of three or four.

Task:

1. How useful or appropriate are the physical activity guidelines for your country?
2. What proportion of the people in your country meet these guidelines? (If there are no national data, estimate the number.)
3. Identify the most inactive sub-groups in your country.
4. What proportion of your country's population do you believe can meet the guidelines you have identified above?
5. Develop a suitable message that could be used as part of your strategy to publicise your local guidelines as identified above.

Session 12: Healthy eating and physical activity

There is no task for this session

Documents

<i>Document 1</i>	<i>MET values for selected activities</i>
<i>Document 2</i>	<i>Target heart rate table</i>
<i>Document 3</i>	<i>Rate of perceived exertion scale</i>
<i>Document 4</i>	<i>Individual activity programmes</i>

Document 1:

MET values for selected activities

MET values for home and occupational activities

<i>Activity</i>	<i>MET value</i>
Light	
Standing	1.3
Reading, talking on telephone	1.5
Sitting at school, studying etc.	1.8
Walking on job, easy casual (3 km/hr)	2.0
Light gardening	2.0
Light office work, light assembly/repairs; standing, light work (bartending, store clerk, filing etc.)	2.0
Walking down stairs	2.5
Cooking; light housekeeping; shopping	2.5
Heavier gardening or yard work	2.5
Pushing pushchair with child; walking dog	2.5
Moderate	
Standing, light/moderate work (welding, car repair), patient care; driving heavy tractor, bus, truck	3.0
Washing car or windows; mopping; playing with children moderately active; outside sweeping; vacuuming; picking fruit/vegetables; scrubbing floors	3.0
Walking on job (4.5 km/hr in office) carrying light object or nothing	3.0
Raking leaves, planting shrubs; weeding garden; other heavy yard work or gardening activities	4.0
Vigorous	
Walking downstairs or standing carrying object 10–20 kg	5.0
Digging, vigorous gardening, using heavy power tools; general gardening mowing lawn with hand mower	5.0
Painting, carpentry; cleaning gutters; laying carpet	5.0
Chopping wood	5.0
Using heavy (other than power) tools	6.0
Walking downstairs or standing carrying object 20–35 kg	6.5
Loading or unloading truck; moving heavy objects; heavy farm work	6.5
Walking downstairs or standing carrying object 35–45 kg	7.5

MET values for leisure activities

<i>Activity</i>	<i>MET value</i>
Light	
Walking (2–3 km/hr)	2.0
Playing a musical instrument	2.0
Walking (3–4 km/hr)	2.5–3.0
Moderate	
Walking (5 km/hr)	3.5
Weights; water aerobics	3.5
Canoeing – leisurely	3.5
Brisk walking (6 km/hr)	4.0
Stair climbing	4.0
Cycling (15 km/hr)	4.0
Swimming – slow	4.5
Golf, carrying clubs	4.5
Walking fast (6–7 km/hr)	5.0
Tennis – doubles	5.0
Vigorous	
Jogging – slow (7 km/hr)	6.0
Tramping	6.5
Cycling (20 km/hr)	8.0
Swimming – fast	8.0
Aerobic, callisthenics	6–10
Jogging (8 km/hr)	8.0
Running (10 km/hr)	10.0

Document 2:

Target heart rate table

Note: MHR = Estimated maximum heart rate

Age	MHR*	Moderate activity			Vigorous activity		
(yrs.)	(est.)	50%	–	70% MHR	70%	–	85% MHR
20	200	100	–	140	140	–	170
21	199	100	–	139	139	–	169
22	198	99	–	139	139	–	168
23	197	99	–	138	138	–	167
24	196	98	–	137	137	–	167
25	195	98	–	137	137	–	166
26	194	97	–	136	136	–	165
27	193	97	–	135	135	–	164
28	192	96	–	134	134	–	163
29	191	96	–	134	134	–	162
30	190	95	–	133	133	–	162
31	189	95	–	132	132	–	161
32	188	94	–	132	132	–	160
33	187	94	–	131	131	–	159
34	186	93	–	130	130	–	158
35	185	93	–	130	130	–	157
36	184	92	–	129	129	–	156
37	183	92	–	128	128	–	156
38	182	91	–	127	127	–	155
39	181	91	–	127	127	–	154
40	180	90	–	126	126	–	153
41	179	90	–	125	125	–	152
42	178	89	–	125	125	–	151
43	177	89	–	124	124	–	150
44	176	88	–	123	123	–	150
45	175	88	–	123	123	–	149
46	174	87	–	122	122	–	148
47	173	87	–	121	121	–	147
48	172	86	–	120	120	–	146

49	171	86	–	120	120	–	145
50	170	85	–	119	119	–	145
51	169	85	–	118	118	–	144
52	168	84	–	118	118	–	143
53	167	84	–	117	117	–	142
54	166	83	–	116	116	–	141
55	165	83	–	116	116	–	140
56	164	82	–	115	115	–	139
57	163	82	–	114	114	–	139
58	162	81	–	113	113	–	138
59	161	81	–	113	113	–	137
60	160	80	–	112	112	–	136
61	159	80	–	111	111	–	135
62	158	79	–	111	111	–	134
63	157	79	–	110	110	–	133
64	156	78	–	109	109	–	133
65	155	78	–	109	109	–	132
66	154	77	–	108	108	–	131
67	153	77	–	107	107	–	130
68	152	76	–	106	106	–	129
69	151	76	–	106	106	–	128
70	150	75	–	105	105	–	128
71	149	75	–	104	104	–	127
72	148	74	–	104	104	–	126
73	147	74	–	103	103	–	125
74	146	73	–	102	102	–	124
75	145	73	–	102	102	–	123
76	144	72	–	101	101	–	122
77	143	72	–	100	100	–	122
78	142	71	–	99	99	–	121
79	141	71	–	99	99	–	120
80	140	70	–	98	98	–	119
81	139	70	–	97	97	–	118
82	138	69	–	97	97	–	117
83	137	69	–	96	96	–	116
84	136	68	–	95	95	–	116
85	135	68	–	95	95	–	115

Document 3:

Rate of perceived exertion scale

Instructions for Borg rating of perceived exertion (RPE) scale¹

While doing physical activity, we want you to rate your perception of exertion. This rating should reflect how heavy and strenuous the exercise feels to you, combining all sensations and feelings of physical stress, effort and fatigue. Do not concern yourself with any one factor such as leg pain or shortness of breath, but try to focus on your total feeling of exertion.

Look at the rating scale below while you are engaging in an activity; it ranges from 6 to 20, where 6 means 'no exertion at all' and 20 means 'maximal exertion'. Choose the number that best describes your level of exertion. This will give you a good idea of the intensity level of your activity, and you can use this information to speed up or slow down your movements to reach your desired range.

Try to appraise your feelings of exertion as honestly as possible, without thinking about what the actual physical load is. Your own feeling of effort and exertion is important, not how it compares to other people. Look at the scales and the expressions and then choose a number.

9 corresponds to 'very light' exercise. For a healthy person, it is like walking slowly at his or her own pace for some minutes.

13 on the scale is 'somewhat hard' exercise, but still feels OK to continue.

17 ('very hard') is very strenuous. A healthy person can still go on, but he or she really has to push. It feels very heavy, and the person is tired.

19 on the scale is an extremely strenuous exercise level. For most people this is the most strenuous exercise they have ever experienced.

6	No exertion at all
7	
8	Extremely light (7.5)
9	Very light
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	Extremely hard
20	Maximal exertion

² © Gunnar Borg, 1970, 1985, 1994, 1998

Source: <http://www.cdc.gov/physicalactivity/everyone/measuring/exertion.html>.

Document 4:

Individual activity programmes

ACTIVITY (Type)	HOW HARD (Intensity)	HOW OFTEN (Frequency)	HOW LONG (Time)	HEALTH RELATED COMPONENT (Endurance/strength/ flexibility)