

PROJECT ViTAL

ViTAL (Vitality Through Active Living) FIJIAN PROJECT





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The ViTAL project aims to aid in the reduction of non-communicable diseases (NCDs) through investment in the health and well-being of women by increasing the level of participation in physical activity (PA) and health eating across the community. Women are agents of change in families, communities and countries. The ViTAL program aims to support, other community-based programs such as community gardens, healthy cooking classes, healthy cookbooks, walking groups and other ongoing physical activity programs.

BACKGROUND

Non-communicable diseases (NCDs) are the leading cause of death globally. The World Health Organisation (WHO) estimates that two thirds of global deaths are caused by NCDs, more than all other causes combined. Around 80% of these deaths – approximately 29 million - occurred in low and middle-income countries. About one fourth of global NCD-related deaths occur prematurely, taking place before the age of 60. (WHO, Global Status Report on NCDs, 2010).

Research findings established that 50% of the adult population in Fiji are projected to be Diabetic within the next 5 years. Four out of five Fijians are dying from an NCDs. Diabetes related comorbidity is fast becoming the number 1 killer in Fiji. NCDs kill more than 4000 people in Fiji each year, giving an average of around 11 deaths per day. More than 82 % of all deaths attributed to NCDs occur before the age of 60. Cardiovascular diseases account for most NCDs deaths in Fiji. Associated risk factors are unhealthy diets, tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets. Also reported are that 15% of Fiji's population exercise, 30 % consume alcohol, 17 % smoke cigarettes. Poor Dietary patterns contributes to the NCDs disease burden more than any other risk factor. Only 15% of our population live beyond the age of 55, Approximately, only 8% of the elderly population live beyond the age of 60.

Over the next 10 years the cost or the disease burden of diabetes, heart disease, a, heart disease, and stroke will take a tremendous toll on the national income of Fiji. (Ministry of Health Data, 2016).

Dietary habits and physical activity are among the most important determinants of health and well-being. An unhealthy diet and a sedentary lifestyle greatly increase the risk for chronic diseases like cardiovascular diseases, obesity, type 2 diabetes, cancer and premature death. Improving dietary habits and physical activity can contribute to achievement of the Sustainable Development Goals.

In the quest to ensure that the correct project initiative is delivered in Fiji, an extensive online search was undertaken to investigate success rates of similar projects globally and in Fiji.

Prime examples of these programmes are:

- The Exercise is Medicine® (EIM) international initiative which provides a foundation for many nations to initiate their own physical activity programmes.
- The Healthy Eating Activity and Lifestyle (HEAL) programme in Australia.
- The EIM® Latin America (EIM LATAM) training healthcare providers programme. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5139105/>
- The New Zealand Green Prescription (GRx) programme.
- The Fiji National Sports Commission programmes:
 - ***The Train the Trainer Program.*** A five-day sports accreditation program conducted in rural communities by National Sporting Organisations for coaches, referees, umpires and administrators.
 - ***Wellness Programs.*** The purpose of the program is to promote fitness and healthy lifestyle in the community.
 - ***Fitness Leaders Program.*** Fitness Leaders are identified by villages to undergo basic training in aerobics instructions and sport specific skills to prepare them to organize physical activity programs for the village or settlement they represent. It is a means by which people in village or rural communities make that FIRST choice to engage in sport or physical activities to combat non-communicable diseases in the community.
- **Get Moving Fiji, 2015.** The physical activity promotions arm of ACATA Trust Fiji (Action for Children And The Aged) Trust Fiji is a leading NGO in health literacy and behaviour change programs in Fiji. They appear to have a strong network and trusted reputation: working in partnership with the Ministry of Health, Ministry of Education, Diabetes Fiji,

Corporate, Town Councils & Health NGOs (local & international) to deliver innovative, evidence based behaviour change programs in schools, villages & communities.

<http://www.nutritionandhealthfiji.com/>

- **Bula 5-30 (2008).** Bula 5-30 is a health promotion initiative of the Public Health Division of the MoH was launched in 2008 by the Minister of Health. The initiative aimed at promoting the concept of eating five servings of fruit and/or vegetables daily and conducting 30 minutes of physical activity every day. This is based on the findings of the 2004 Fiji National NCD STEPS Survey of a sample of 7000 people, which identified that the population ate little fruit and vegetables, did little physical activity, smoked too much and drank considerable amounts of alcohol.
http://www.wpro.who.int/asia_pacific_observatory/hits/series/Hits_FJI_5_services.pdf
- **The Healthy Youth Healthy Community (HYHC) project** This project used a settings approach in secondary schools and faith-based organizations to increase the capacity of the whole community, including churches, mosques and temples, to promote healthy eating and regular physical activity, and to prevent unhealthy weight gain in adolescents aged 13–18 years. This Fiji Action Plan included nine objectives for the school settings; four were based on nutrition and two on physical activity in schools, plus three general objectives, namely capacity building, social marketing and evaluation. Long-term change in nutritional behaviour was difficult to achieve; a key contributor to this was the unhealthy food served in the school canteens. Whilst capacity-building proved to be one of the best mechanisms for intervening, it is important to consider the cultural and social factors influencing health behaviours and affecting specific groups.
- **Move for Health Fiji (2004)** a nationwide project conducted between 2004 and 2008. Implementation took place in the context of Fiji’s National NCD Strategic Plan (2004–2008) which included promotion of physical activity as a key action area, coordinated by a subcommittee on physical activity within the Ministry of Health. Media pamphlets for this project can be viewed on the following webpage:
<http://www.who.int/dietphysicalactivity/bestpracticePA2008.pdf>
- **LIVE HEALTHY, STAY HEALTHY FIJI (2005)** The *Live Healthy, Stay Healthy* was a media campaign. Promoted in the form of a booklet, it was the latest addition to Fiji’s wellness movement in the fight against non-communicable diseases (NCD) such as diabetes and heart disease. The booklet was designed in partnership between the Ministry of Health and Medical Services, Secretariat of the Pacific Community and the National Food and Nutrition Centre with the aim to create a new resource to inspire healthy Fijian lifestyles. *Live Healthy, Stay Healthy* was unique and different from other health resources as it came in the form of a wellness challenge. The booklet challenged people to eat two servings of fruit, three servings of vegetables and to be active for 30 minutes every day. There was also a health checklist for people to monitor their progress and the challenge empowered people to take charge of their personal health and wellness. It was hoped that by striving towards these three challenges every day, people could lower their blood pressure and blood cholesterol, control their blood sugar and improve their fitness to help

fight off and control diabetes and heart disease. The booklet can be viewed on webpage: https://issuu.com/pacificdiets/docs/live_healthy_stay_healthy_fiji.com

FOUNDATION CONCEPTS FOR THE VITAL PROJECT

Wellness/well-being is defined as “an integrated and dynamic level of functioning, oriented towards maximizing potential, depending on self-responsibility” (Robbins, Powers & Burgess, 2002). Wellness is therefore about the dynamics of life, making responsible choices, a way of life and a mind-set based on personal empowerment towards the various dimensions of wellness.

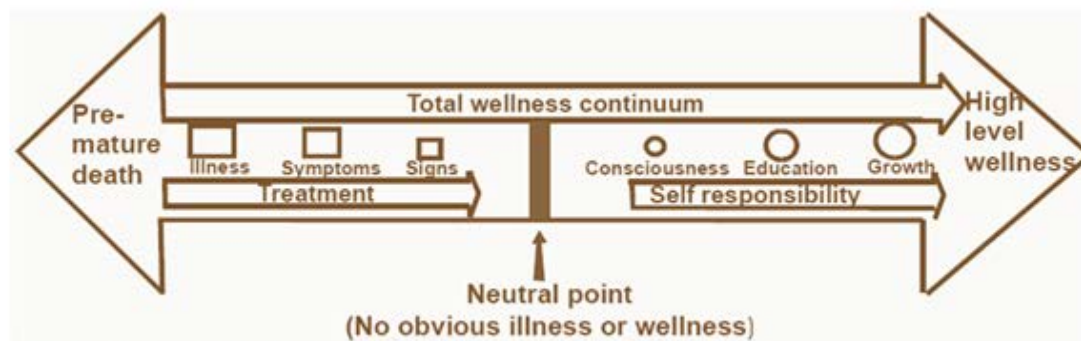


Figure 1: Illness/Wellness continuum (Travis, 1972).

On the illness/wellness continuum, first constructed by Travis in 1972 (www.wellpeople.com), most people accept the neutral point as a reference of good health, as no discernible illness is present. When moving to the left side *Physical activity, health and well-being* (treatment side) on the continuum some signs, symptoms and/or disability occur, which need medical treatment of the specific condition. After receiving the treatment and the patient returns to the neutral point, many then accept this as perfect health, not knowing or not willing to accept self-responsibility in order to gain further improvement, striving to high-level wellness. On the treatment side (left) of the continuum, no active involvement from the patient is required, while the activity on the right hand side (health promotion) requires active involvement by taking self-responsibility. This might require the patient to change his/her lifestyle, viz. stop smoking, lose weight, be more active etc. In this respect many patients may have some barriers to overcome and need some support to change their health behaviour (Rollnick, Masson & Butler, 2005).

In order to progress to optimal health and wellness (the right hand side of the continuum) patients/ individuals need to gain awareness and knowledge in order to make the changes in their attitudes and behaviours (Sharkey & Gaskill, 2007). Dickman (1988) describes this as an interaction of thoughts and behaviour with wellness, suggesting the following equation: Wellness ↔ Thoughts ↔ Behaviour.

Education of the individuals is therefore of paramount importance to empower them to take proper action and decisions to improve own wellness (Strydom, 2012). This is one of the aspects of the ACSM's initiative of "Exercise is Medicine" (2007), by way of which they tried to encourage medical practitioners to prescribe exercise to a patient where needed, as they do with medicine.

VISION AND OBJECTIVES

The vision of Project ViTAL is to empower women, their families and the whole community to be physically active, eat healthy food and live in environments that support healthy behaviours to reduce obesity, chronic disease and enhance well-being. To prepare women to take leadership functions in the delivery of sport and/or active recreation and fitness in their communities, so offering them with both a meaningful context in which to utilize their leadership skills as well as a way for creating a positive and immediate contribution to their communities.

The objectives of Project ViTAL are too:

- Give high priority to healthy eating and physical activity through the empowerment of women through leadership skills and education.
- Support and enabling the whole community to adapt to healthier patterns of living by encouraging physical activity, promoting healthy foods and recommendations of alternative products for those high in salt, sugar and fats.
- Empower women to achieve the required physical and health literacy, thus creating opportunities for their children (and family) to adopt a healthy lifestyle from an early age and to make informed choices about their lifestyles throughout the life course.
- Make provision for a flexible curriculum which highlights health, nutrition, food preparation, which encourages physical activity develops skills in goal setting and behaviour.
- To improve understanding regarding dietary misconceptions.
- To support participants to become more physically active and to participate in regular physical activity.

The World Health Organisation (WHO) has calculated that the cost of chronic disease in a country is 2-7 % of the annual health budget. Therefore, the challenge for Project ViTAL is to

make it easier for all Fijians to eat well and be more active. The key messages from Project ViTAL in terms of improving nutrition, increasing physical activity and maintaining a healthy body weight are to:

- eat a variety of nutritious food
- eat less fatty, salty and sugary food
- eat more fruit and vegetables
- be active every day for at least 30 minutes
- add some vigorous exercise for extra benefit and fitness
- aim to maintain a healthy weight throughout life
- promote and foster the development of environments that support healthy lifestyles

CREATING A HEALTHY REVITALIZED COMMUNITY WITHIN FIJI

Physical inactivity, along with other lifestyle-related health risk factors such as an unhealthy diet, is becoming increasingly prevalent in developing countries which face rapid economic and social development, urbanization and industrialization. The importance of physical activity as a means of NCD prevention and control is recognized in developing countries, as well as the need for suitable programmes, policies and guidelines. However, the evidence on implementing physical activity interventions in a developing country context is sparse. It is evident from research findings that encouraging participation in health-enhancing physical activity is a public health issue of urgent concern. A healthy revitalised community is one that is concerned about the well-being of the community, protection of the environment and investing into future generations. Research stresses that physical activity interventions carried out in developing countries include strategies to:

- raise awareness of the importance and benefits of physical activity among the community,
- educate the whole population and/or specific community groups,
- conduct local physical activity programmes and initiatives;
- build capacity among individuals implementing local physical activity programmes through training of potential programme coordinators; and
- create supportive environments that facilitate participation in physical activity;

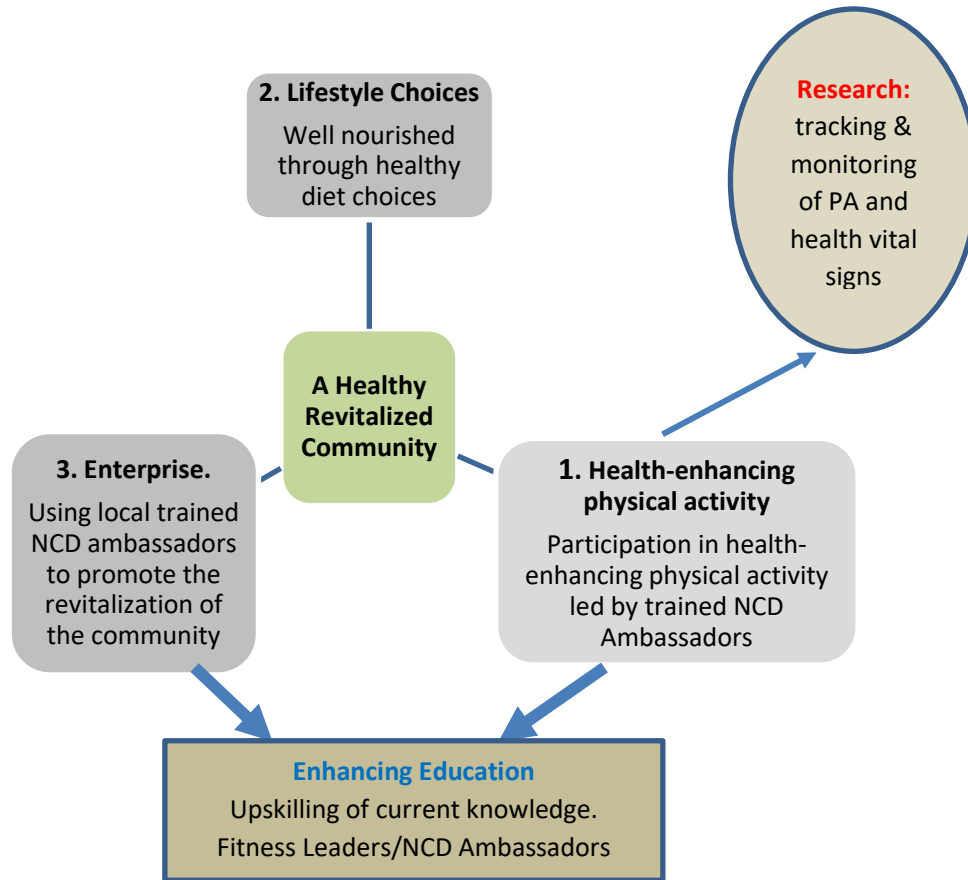


Figure 2: Three prong approach to community revitalization

As evident from research, for the ViTAL project to add value, it requires a three-prong approach (figure 2) which incorporates recommendations found in research:

1. Participation in health-enhancing physical activity

Physical activity experiences are an integral part of human development. They contribute to people’s physical health and well-being, growth, personal development, and self-esteem. Physical inactivity increases the risk of many chronic diseases, such as cardiovascular diseases, diabetes and cancer. Overweight affects many adults globally. Physical inactivity causes an estimated 600 000 deaths per year globally, and leads to a loss of 5.3 million years of healthy life expectancy per year. The economic consequences of physical inactivity have been shown to be substantial for health care costs, but even greater on indirect costs, which include the value of economic output lost because of illness, disease-related work disability and premature death. Encouraging GPs or health workers to ‘prescribe’ physical activity (also known as exercise referral) can also be an effective behaviour-change intervention. The prescription is tailored to the health needs of the individual patient, and can be as simple as a written suggestion of an activity or a much more comprehensive solution, supported by an activity organiser such as volunteer or sports organisations.

2. Well-nourished community through Lifestyle choices

A balanced diet can help individuals maintain good health and prevent various types of chronic diseases. A strong link exists between diet and disease. Consuming a diet rich in fruits and vegetables reduces the risk for heart attack, colon cancer, diabetes, and high blood pressure, and may reduce the risk of stroke.

Financially, socially and environmentally it makes sense to help the community learn how to provide more of their own healthy food. This model is self-sustaining and financially robust. Community gardens are recognised worldwide as a great way to grow food, improve your health, meet people, and cultivate vibrant communities. Community gardens often provide enough food to share the surplus and/or develop community enterprises. Food and Nutrition for a Healthy community, encourages the whole community to get involved in creating a positive environment that supports making healthy food choices thus leading to a healthier community.

3. Enterprise.

Community programmes led by trained NCD/PAL's that are placed back into their community, could have a major influence on their community physical activity levels. They are role models, and they influence the community by their own attitudes to, and involvement in, physical activity. Trained NCD/PAL's within their communities are more likely to become involved in what their communities are learning in lifestyle modification programmes and to help them to value physical activity and be active for life. NDC/PAL's are well placed to ensure that a positive physical activity culture is established and maintained. Using community members to resource the community led programme is a way in promoting sustainable use of local resources, optimizing the capacity of the community to develop new sustainable sources of income.

The human body was meant to move, and several terms can be used to encourage and enable people to move about. Depending on the Fiji need/situation, the ViTal project design could be a programme that incorporates "physical activity", or "active living" or "sport" or any combination of these three.

Active living is a way of life that integrates physical activity into daily routines. The goal is to accumulate at least 30 minutes of activity each day. Individuals may do this in a variety of ways, such as walking or bicycling for transport, performing fitness exercises, participating in sports (both organized and informal), playing in the park, working in the garden, taking the stairs and using recreational facilities.

Physical activity is any bodily movement produced by skeletal muscles that results in energy expenditure above resting level. This includes walking or cycling for transport, dance, traditional games and pastimes, gardening and housework as well as sport or deliberate exercise.

All forms of physical activity can be beneficial, but the goal is to enjoy health-enhancing physical activity, defined as any form of physical activity that benefits health and functional capacity

without undue harm or risk. This is best achieved by incorporating physical activity of at least a moderate intensity (such as brisk walking and other activities that make you breathe harder and feel warmer) into daily life.

Sport usually involves some form of competition, although this guide is mainly concerned with the sport for all movement, which stresses participation, fun and skill development rather than winning and elite performance. Organized sport is an integral part of Fiji culture and starting to believe.

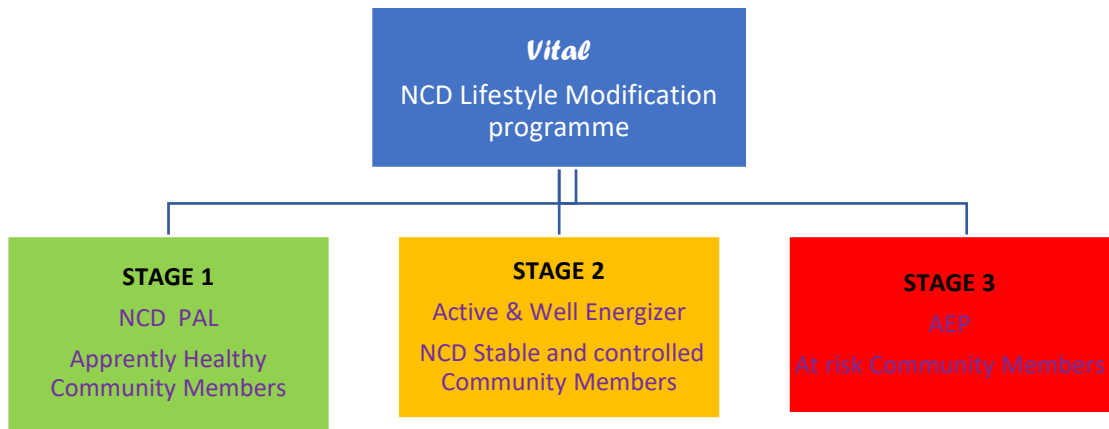
END GOAL

Revitalize a community to be a well-nourished, healthy, active and innovative community.

A healthy community is not one that has achieved a particular health status. Rather, it is a community that is conscious of health and striving to improve it. What is required is a commitment to health and a process and structure to achieve it. A healthy, active community is one that is continually creating and improving opportunities in the built and social environments and expanding community resources to enable all its citizens to be physically active in day-to-day life.

As the rates of NCDs continue to rise, research shows that greater efforts and resources are being invested in how to best encourage people to live a healthier lifestyle, including making better physical activity and nutritional choices. Research over the past few decades has provided a greater understanding of the factors influencing whether or not an individual or community is physically active and well nourished. In recent years there has been a shift away from encouraging individual behaviour change to an approach that addresses wider, population-level factors. Individualised behaviour change is often not sustainable or effective unless it becomes habit-forming. Changing the overall environment makes behaviour change more sustainable. There are different levers that can be used at the population level to change both the social environment and the built environment, which together influence the health and diet choices made by individuals. Factors in the social environments known to influence participation in physical activity are socioeconomic status, cultural beliefs, and opportunities to improve social cohesion in the neighbourhood, city and regions. Factors in the built environment that influence participation in physical activity are urban design, transport (traffic), availability of green space, and land-use patterns. Fostering long-term behaviour change requires overcoming perceived barriers that need to be overcome to get regular employment, letting in a lack of motivation and a shortfall of time.

THE VITAL PROJECT MODEL



STAGE 1:

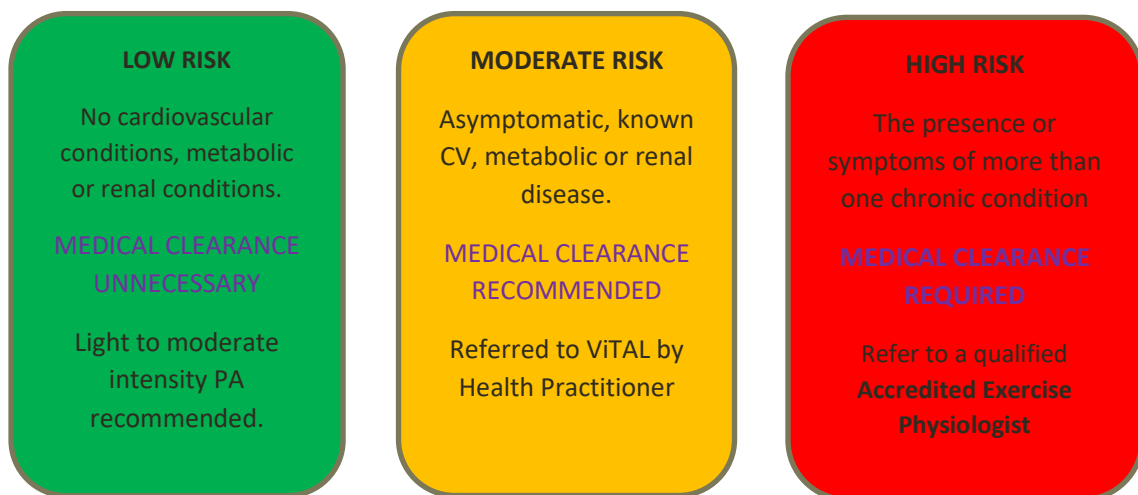
NCD /PAL's = Fijian Sport Commission trained Fitness leader. These community leaders lead the programme for *low risk* apparently health community members. Members do not need medical clearance but must undergo appropriate screening.

STAGE 2:

ACTIVE & WELL energizer = (FNU Grad Diploma in Health and Wellness) These leaders lead the programme for *low to moderate risk* community members. (Have a controlled and stable NCD). Must be referred by Health Practitioner.

STAGE 3:

AEP = University trained postgraduate graduated and accredited AEP (Either do our programme or FNU programme). Community members are *moderate to High risk clients*, must be *medically cleared* and have been referred by the Energiser.



STAGE 1: NCD Ambassador/ Physical Activity Leaders (NCD/PAL)

The NCD Ambassador/ Physical Activity Leader (NCD/PAL) programme gives women responsibility and an opportunity to be seen in a leadership role. At the same time the programme helps to encourage women's participation in sport and physical activity and contributes to their 30 minutes of physical activity a day. The NCD/ PAL programme is an adaptable programme which should be designed to suit the needs of the women. Being a NCD/PAL gives women within the community a sense of pride and satisfaction and a chance to develop a role model status.

Some noticed benefits of running the NCD/PAL programme include:

- Women developing personal leadership skills.
- Women have an opportunity to accept more responsibility, appreciation, and respect from the community.
- Women gain a sense of satisfaction for helping the enjoyment of others while working towards a happier, healthier, more physically active life!
- Provides a great teaching and learning opportunity in leadership, sportsmanship, and teamwork.
- Education of community towards a healthy eating lifestyle

Examples of NCD/PALs in action within communities:

- Leading and running games and activities.
- Responsible for and involved in the planning of community sports and recreation events.
- Running activity events to promote what they do.
- Responsible for “Caught Being Active” Awards.
- Setting up weekly challenges such as skipping,

The opportunities are limitless!!

The content of the NCD Ambassador/ Physical Activity Leader week training programme is selected to provide women with a the variety of activities available, from which they can choose in order to develop a healthy active lifestyle that will sustain them and their community. The following chart presents some examples of the activities that women may explore:

Day 1	Day 2	Day 3	Day 4	Day 5
Physical activity/Exercise				
What Kinds of Exercises and Physical Activities Improve Health and Physical Ability? Testing Tools	ENDURANCE ACTIVITIES	STRENGTH ACTIVITIES	BALANCE ACTIVITIES	FLEXIBILITY ACTIVITIES
Lifestyle/Nutrition				
The Four Food Groups & Portion sizes	Sugar and Hidden Sugars	Fat in the diet	Understanding Food Labels	What to eat to get and stay well
Leadership				
Self-discovery	Building Relationships	Engaging with the Community	Develop critical thinking	Educate & inspire others

EXAMPLES OF WORKSHOP CONTENT:





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What is ViTAL?

Vital is an eight-week lifestyle modification programme. The acronym ViTAL stands for

Vitality

Through

Active

Living

STAGE 1

The **Stage 1** *Vitality through Active Living (ViTAL)* project is an eight-week lifestyle modification program delivered by trained NCD ambassador/physical activity leaders, that supports apparently healthy community members to develop lifelong healthy eating and physical activity habits. The project covers lifestyle education and physical exercise through one hour per week of healthy eating and lifestyle education, complemented by daily 30 minutes of low to moderate intensity exercise in a supportive group environment. The program can be delivered in a variety of community settings, and empowers participants to take responsibility for their own health, leading to long-term improvements in health and wellbeing. One-on-one health consultations to assess current fitness, measure and assist ongoing progress are also provided.

- At the start of the program
- After the 8 weeks of classes

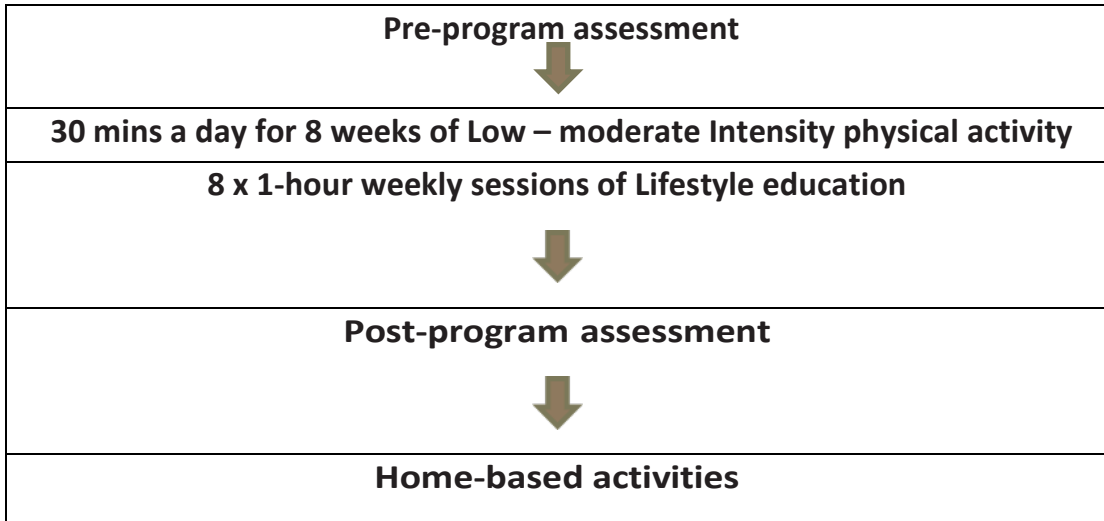
Program Objectives

- To improve understanding regarding dietary misconceptions.
- To support participants to become more physically active and to participate in regular physical activity.
- To promote and improve healthy eating.
- To improve nutrition knowledge.
- To develop skills in goal setting and behaviour.

- To develop skills required to maintain a healthy lifestyle.

ViTAL Project Delivery

Stage 1: Step by Step



Participants were deemed to have completed the program if they had attended at least six of the eight Lifestyle sessions and daily 30 minutes of physical activity. On completion each participant will receive a programme of home-based activities and or a home exercise program.

Project Assessments

Test 1: Resting Heart Rate

Test 2: Body Size and Composition

Test 3: Flexibility

Test 4: Balance

Test 5: Core Strength

Test 6: Lower Body Strength

Test 7: Upper Body Strength

Test 8: Leg Power

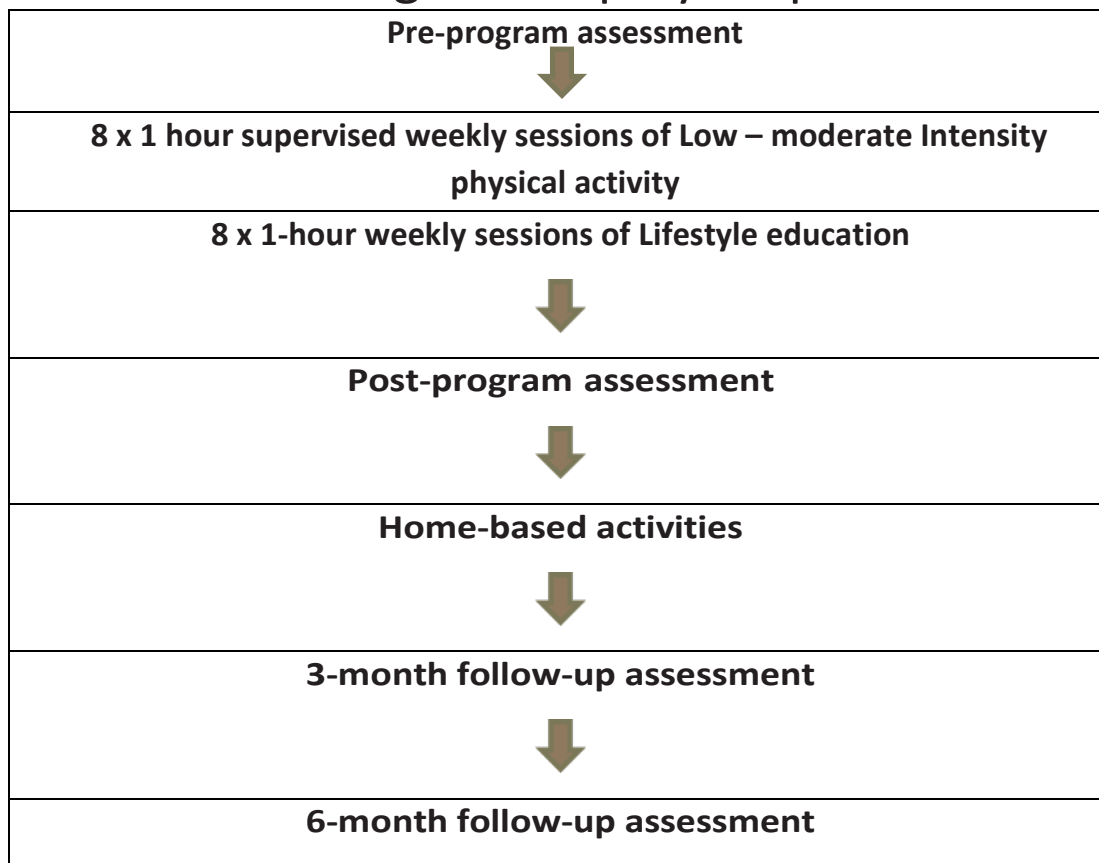
Test 9: Speed and Agility

Test 10: Endurance

STAGE 2

The **Stage 2 Vitality through Active Living (ViTAL)** project is an eight-week lifestyle modification program delivered by trained ACTIVE & WELL energizers (FNU Grad Diploma in Health and Wellness), that supports low risk community members with stable and controlled NCD's, to develop lifelong healthy eating and physical activity habits. Community participants are recommended to obtain medical clearance and be referred to the programme by a health practitioner. The project covers lifestyle education and physical exercise through one hour per week of healthy eating and lifestyle education, complemented by supervised one on one weekly sessions of low to moderate intensity exercise in a supportive environment. The program can be delivered in a variety of community settings, and empowers participants to take responsibility for their own health, leading to long-term improvements in health and wellbeing. One-on-one health consultations to assess current fitness, measure and assist ongoing progress are also provided.

Stage 2: Step by Step



Participants were deemed to have completed the program if they had attended at least six of the eight Lifestyle sessions and one on one physical activity sessions. On completion each participant will receive a programme of home-based activities and or a home exercise program.

Project Assessments

Test 1: Chair Stand Test — testing lower body strength

Test 2: Arm Curl Test — testing upper body strength

Test 3: Chair Sit and Reach Test — lower body flexibility test

Test 4: Back Scratch Test — upper body flexibility test

Test 5: Timed Up and Go Test — agility test

Test 6: Step in Place Test (2 minutes) endurance test

Test 7: Balance Platform Test

STAGE 3:

Stage 3 of the Vitality through Active Living (ViTAL) project is an eight-week lifestyle modification program delivered by university trained accredited exercise physiologists (AEP). This stage of the ViTAL project is specifically designed to assist people who are obese, have diabetes or are at high risk of chronic disease or who have one or more chronic diseases such as heart disease and diabetes. People who are ready to change their behaviour will benefit most from participating in this stage. The individualised exercise sessions involve low to moderate intensity aerobic & resistance activities and may be modified to suit individual needs. It is a requirement of this stage, that clients undertaking this project, be medically cleared and referred to an AEP by a Health Practitioner.

This stage involves individualised assessment, exercise advice, prescription, behavioural change counselling and support for people with chronic and complex disease(s). Clinical exercise prescription is based on evidence based research and may include cardiorespiratory and/or resistance exercise advice and support for increasing incidental exercise, balance, agility, coordination and strategies for reducing sedentary behaviours. The prescription would incorporate an individualised combination of these modalities which would be balanced with the client's goals, readiness to change, knowledge, skills and access to resources.

Assessment for this stage are depend on the client's condition and needs.

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