

PROPOSAL FOR A CORPORATE HEALTH PROGRAM
FOR
THE DEPARTMENT OF CONSERVATION AND
LAND MANAGEMENT

CORPORATE HEALTH UNIT

DEPARTMENT OF HUMAN MOVEMENT AND RECREATION STUDIES

THE UNIVERSITY OF WESTERN AUSTRALIA

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Introduction

Due to the present day economic climate, industry is now realising a conscious concern for the physical and emotional wellbeing of its employees. Implementation of an holistic health and well being programme with input from various specialists, may also play a major role in enhancing the effects of Total Quality Management through a more acceptable work climate.

Increasingly there has been an emphasis on "human resource accounting" which values employees as assets in which the organisation has made a considerable investment via recruitment, selection, training and development. It is therefore important to ensure optimum levels of health, fitness and wellbeing to help maximise returns on this corporate investment. Employees are a company's main asset.

An holistic health and fitness programme, as coordinated by the University of Western Australia, will provide the means to help achieve the objectives seen by the Department of Conservation and Land Management. A sample programme for the first twenty weeks is attached, however, the itinerary is flexible.

Specific Aims of the Programme

- 1 To assess the initial fitness levels and risk factors applicable to all participants, and to evaluate these on an on-going basis.
- 2 To optimise the aerobic capacity (fitness) of participants.
- 3 To optimise the energy levels of participants.
- 4 To motivate and teach participants how to exercise regularly and safely.
- 5 To increase participant awareness of the importance of modifying certain lifestyle behaviours (eg diet, stress, inactivity, etc).
- 6 To provide participants with skills to combat negative lifestyle behaviours.
- 7 To develop networking and team buildings skills within the participants.
- 8 To help encourage a positive corporate identity within participants.

Summary of Proposed Programme

- 1 Diagnostic health and fitness assessment pre and post program. A 12 lead ECG stress test will be undertaken.
- 2 Fitness programme
 - Two activity sessions per week.
- 3 Worksite Health Promotion
- 5 Health and lifestyle lectures on a variety of topics.
5. On-going evaluation of the programme's progress.
6. Pre and Post Research regarding the effectiveness of the programme at many levels.
8. Re-test fitness assessment and cholesterol after 12 months, and then annually.

Corporate Health and Fitness Program

Diagnostic Health and Fitness Assessment

The health and fitness testing accurately determines the current level of health and fitness of the individual. Exercise testing is conducted to aid in the diagnosis of coronary heart disease, assess the safety of exercise prior to starting an exercise programme, assess cardio-pulmonary functional capacity, determine current stress levels, and to act as a motivational device to establish goals towards a healthier lifestyle. Those people wishing to partake in the physical activity sessions must undergo a fitness assessment.

The Diagnostic Health and Fitness Test Includes:

- 1 Cardiovascular state.
- 2 Anthropometry
- 3 Lung Function.
- 4 Physical Performance.
- 5 Back Care

6 Stress and Lifestyle

Each participant is consulted by a registered physician prior to any testing. All testing will be completed by a qualified consultant, with a full consultation taking place after the testing. The results of all tests are discussed with the participant in relation to lifestyle factors and personal goals immediately following the testing series.

An Explanation of the Tests:

1 Cardiovascular State

Measures taken concern blood flow characteristics and are used for screening purposes.

Tests:

- Blood pressure
- Resting pulse rate

2 Anthropometry

Measures made cover general body dimensions and composition.

Tests:

- height, weight and girths (for personal comparison over time)
- Skinfold measurements (or 'pinch' test) for calculation of total body fat and optimal body weight.

3 Lung Function

Measures are made of respiratory efficiency and capacity. The lung function tests are used basically as a screening measure to ensure that air can effectively be transferred into and out of the lungs. Lung function can be affected by such factors as smoking, asthma, emphysema and bronchitis. The scores do not have a direct relationship to fitness levels, but can aid in the early diagnosis of respiratory diseases.

4 **Physical Performance**

Tests:

- i) Flexibility or 'Sit and Reach' gives an indication of the range of mobility of the lower back and hamstrings. A test to measure lower back and hamstring mobility was selected as there tends to be an increased incidence of low back pain and disability associated with reduced flexibility of the lumbar spine and inelasticity of the hamstring muscles.
- ii) Local Muscle Strength and Endurance: Abdominal muscles are to be tested for endurance once a minimal strength has been determined. This area was selected as there tends to be a relationship between weak abdominal muscles and low back pain.

A twelve lead ECG stress test will establish any adverse health implications such as coronary heart disease, ischaemia, etc, as well as aerobic fitness. Blood pressure, heart rate and an ECG trace will be monitored continuously whilst the person is active. The test may take between eight and fifteen minutes depending upon the initial fitness level of the individual. Following the initial stress test, PWC₁₇₀ aerobic fitness tests will be completed at six monthly intervals.

5 **Back Care**

Eight out of ten Australians have back pain at some time during their lives. The tests used here may be predictive of future back pain or may isolate problems that already exist.

The Wall Slide

The wall slide tests quadriceps endurance and involves sliding up and down a wall using the correct technique.

The Passive Extension Test

By lying on the stomach and raising the body to elbow height, you are extending your back, allowing the muscles and ligaments around your spine to relax. This position is held for a particular length of time, depending upon the existence of pain.

6 **Stress and Lifestyle**

Measures are made here through the use of brief questionnaire type assessments.

Tests:

- **Stress and Lifestyle Inventory:** Assessment of current lifestyle, health and vulnerability to stress.
- **Coronary Heart Disease Risk Factors:** Eight numerically listed risk factors allowing the participant's comparison with community levels.
- **Values classifications and action suggestions are provided.**

3 **The Physical Fitness Program...** (please see sample provided)

Weekly Activity Sessions

It is recommended that the activity sessions are initially run twice a week by a consultant from the Department of Human Movement and Recreation Studies for at least the first six months. As the programme progresses, the participants will be taught to plan their own sessions.

The activity sessions can range from aerobics, to swimming, tennis or volleyball. The choice is endless and there is flexibility within the programme. Massage, relaxation and other such activities may be organised if requested. The weekly sessions assist in increasing fitness levels and team cohesion. However, it is recommended that the participants commit themselves to exercise at least one other time per week. It is envisaged that the sessions will take place on Monday and Thursday mornings, and will primarily be in the Woodvale High School gymnasium. Each activity will be implemented for six weeks, with two different activities occurring on the Monday and Thursday. The time period allows time for skill development but is not so long that the activity becomes boring.

Themes

Throughout the programme monthly themes are used to help reinforce lifestyle modifications and are usually linked to the lecture content. Notes are often given and it is recommended that people keep a separate "health" file for their own interest.

4 **Worksite Health promotion (2 hours per fortnight)**

There are many screenings and activities that may be organised within the workplace.

Screenings many include-

- i) blood pressure
- ii) flexibility
- ii) eye strain
- iii) back screening
- iv) skin cancer screening
- v) diabetes (glucose)

others may be added if requested. Other health promotion activities include information posters within the workplace, healthy breakfasts, discussion groups and workshops on various issues. Employees request topics to be covered.

5 **Health and Lifestyle Lectures** (see sample programme for examples of some lectures)

A series of lectures will be chosen, again according to the values and needs of the group, and will provide extra information and practical skills to help participants modify their lifestyle if need be.

On going-competition

An on-going competition based primarily on participation may also be used as a motivational tool. Prizes may be a syndicate group breakfast at Miss Maud's, an Aerobic video tape, and the like.

Spouse Involvement

Although it is not envisaged that spouses will take part in the fitness testing, they are welcome to come to the activity sessions as long as a medical clearance has been obtained from the family doctor, and it is given to the fitness leader. No cost will be incurred with most activities, however activities costed per person will need to be covered.

Spouses also will be most welcome to attend the lectures if this is agreed to by the Department. Spouse involvement is a decision that CALM must make.

6 On-going Evaluation of the Programme's Progress

A senior consultant will evaluate the programme initially every two weeks to check the reaction of participants to the programme. This will help to ensure a high quality programme.

7 Pre and Post-Research Data

Collected to evaluate the effectiveness of the Corporate Health Programme, this may include such factors as:

- i) Exercise adherence
- ii) Productivity
- iii) Absenteeism
- iv) Morale
- v) Health attitudes
- vi) Self Esteem

A matched control group would be needed to complete the research, and your help regarding a similar Department would be appreciated. However, pre-posed testing would still show changes due to the programme if a control group could not be found.

	FITNESS PROGRAMME		LECTURES	MONTHLY
WEEK	MONDAY	THURSDAY	Intro to Concept/ General Health	Theme
1 ↓ 4	Walk/Jog	Low Impact Aerobics		
5 ↓ 8	Volleyball	Gym Circuit	Nutrition	THR/Flexibility
9 ↓ 12	Body Weight Circuit	Badminton	Backcare	Flex/ Back Care
13 ↓ 16	Power Walking	Cricket in the Gym	Stress Management	Back Care
17 ↓ 20	Cycling	Volleyball	Stress Management	Relaxation
21 ↓ 24	Aerobics	Modified Basketball	Simple ways to a Positive Lifestyle	Home Exercise Planning

