Lifestyle-integrated Functional Exercise (LiFE) program to prevent falls

Trainer’s manual

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The Lifestyle-integrated Functional Exercise (LiFE) program to prevent falls has been proven effective in reducing the risk of falls and in improving capacity for functional everyday activity. Balance and strength, particularly ankle strength, can be markedly improved and maintained if the LiFE program becomes part of daily routines.

The LiFE activities have all been designed to help you keep active and reduce your chance of falling.

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Introduction
Introduction

Welcome to the LiFE trainer’s manual.

If you are reading this manual you will potentially be training people to do the LiFE program.

All the information in the trainer’s manual is relevant and important to be able to effectively train participants. The sections are presented in an order that follows a logical pattern. However, you do not need to read from front to back.

What is LiFE?

The Lifestyle-integrated Functional Exercise (LiFE) program to prevent falls is unique and novel. LiFE involves teaching core underlying principles of balance and strength training. These principles form the basis for the balance activities and strength activities used in the program. The participant makes changes to how they perform their daily tasks to include these activities. That is, they embed the activities into their daily tasks and routines. Eventually the changes become a habit that is going to improve the balance and strength of the participant.

The participant and therapist plan how to embed these activities into the participant’s daily routine. No two participants will have exactly the same program as it will be determined by what the participant routinely does and how they decide to embed the activities into their individual routine.

LiFE was developed in response to a need to provide options that are acceptable to older people and are sustainable over the long term. To develop the balance and strength training we drew on programs such as Helping Elders Activate their Lives (HEAL) (Fiatarone Singh & Murphy, 2003) and evidence for effective falls prevention to devise our core principles and strategies. Our belief was that functional-based activity will closely align to skills needed to prevent falls and improve the participant’s capacity to recover from loss of balance or tripping.

The concept of balance training or the notion that you can improve your balance is not easily understood. Yet there are many opportunities in daily life to challenge balance and load the muscles to make them work harder. LiFE incorporates an understanding of these principles and provides many examples that can be incorporated into the activities of daily life.
What does LiFE do?

The aim of the LiFE program is to reduce falls and improve functioning in older people by embedding activities that improve their balance and strength into the participant's daily tasks and routine.

Participants need to continuously challenge their balance and make their muscles work harder. In the LiFE program the balance and strength activities are incorporated into their daily tasks. This is why it is called a Lifestyle-integrated and Functional Exercise program.

Who is LiFE for?

The LiFE program is for anyone who is at risk of falling. Participants must be able to comprehend the program and not have a cognitive impairment. They must be able to safely perform the LiFE activities unsupervised. They should not have a neurological condition that affects their balance. Although the participants in the research had two falls in the past year or one injurious fall which they self-reported, this program is not just for those who have already experienced a fall – it is aimed at the prevention of falls.

Who can offer the LiFE program?

A LiFE trainer needs to understand the key elements of the program, how to implement these for each individual and how the activities will benefit the person undertaking them.

To be a successful LiFE trainer you need to:

- have a belief that it is possible to improve strength and balance in older people and that this will have a direct impact on protection from falls and improved function
- understand the LiFE principles of balance and strength training and be able to teach these to participants
- understand the seven balance and seven strength activities and be able to teach people how to incorporate these into their daily tasks and routines
- be able to provide effective feedback and motivation to participants
- work with concepts of habit-change to enable participants to implement and sustain LiFE activities
- Be able to assist participants to become autonomous in implementing the activity program.

In our research we have had occupational therapists, physiotherapists and exercise physiologists teaching the LiFE program.
Before teaching the program therapists need to:

- read thoroughly the LiFE participant’s manual (*Lifestyle-integrated Functional Exercise (LiFE) program to prevent falls: participant’s manual*)
- practice the activities in the participant manual themselves
- spend time implementing the program into their own daily routine
- understand how to complete the assessments used for the LiFE program
- understand how to complete and appreciate the importance of the recording sheets that accompany the program.

It is strongly recommended that before teaching the program therapists and trainers implement the LiFE program, or significant sections of it, into their own routines.

Each participant will need their own copy of *Lifestyle-integrated Functional Exercise (LiFE) program to prevent falls: participant’s manual*. The participant’s manual includes the principles, activities, tips, photos and ideas on how to include the balance and strength activities into the activities of daily life. Throughout this trainer’s manual we will refer to information that can be found in the participant’s manual.

**LiFE is different to traditional exercise programs. Some therapists may need to ‘get out of their therapist hat’. Therapists need to let participants decide when and where they will do the LiFE activities. The activities are not taught as a set in one place; instead, you need to move about the participant’s home and enviroment. Therapists and participants together work out different LiFE activities that suit different places. It is a more facilitative process.**