

CANCER RECOVERY SPECIALIST

Advanced Concepts

Volume 1



NFPT

Understanding Various Cancer Treatments and How to Use Specific Exercises and Training Protocols for Safe and Effective Training with Cancer Survivors.



CANCER RECOVERY SPECIALIST

A Course for the Safe and Effective Application of Exercises for the Cancer Survivor, including Stretching and Strength Training Exercises to be used during and following Cancer Treatment

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National Federation of Professional Trainers, NFPT, has partnered with Recovery Fitness to bring you this educational resource for training an increasingly growing population of cancer patients and survivors. Cancer Recovery Specialist is an educational course offering a series of stretching and strength training exercises to be used during and following treatment for cancer. It is not medical advice, nor does the author intend that this manual supplant your client's medical care. It is imperative that your client consult with his or her physicians and other health professionals before incorporating any aspect of this manual into their daily life.

Numerous people lent their expertise and experience to help create this course. Thank you to all of the health professionals at Morristown Medical Center and Barnabas Health for your support; and a special thank you to Dr. and Mrs. Milton Michaels and Dr. Marian Michaels for their guidance and knowledge throughout the development of this text. Remember, though this manual was written, reviewed and collaborated by many healthcare professionals, it is still imperative that your client consult with his or her physician/s/ before engaging in any physical activity during or after cancer treatment. Neither the author nor publisher, or collaborators, of this manual make any representation nor warrant that the exercises or other information contained in this manual will be appropriate for your client or their particular needs. The author, Carol Michaels, Recovery Fitness, LLC, the publisher and course collaborator and partner, National Federation of Professional Trainers, NFPT, hereby disclaim any and all responsibility for any liability, damage, loss or risk incurred by anyone directly or indirectly arising out of the use of this manual, and the exercises or other material contained in this manual.

I dedicate the Recovery Fitness cancer exercise program to my parents, aunts, uncles, grandparents, friends and clients who have had cancer surgery and treatments. Their strength and courage provided the inspiration for this course. It is my hope that your client's recovery from cancer surgery and treatments will be improved by performing the exercises in this manual. I hope it will help them return to the things that they enjoyed prior to their diagnosis and improve their quality of life.

—Carol Michaels

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Foreword

Exercise is an important component of a cancer survivor's recovery process. Emerging research suggests a decrease in breast cancer recurrence for those who exercise. A well-designed program can also decrease side effects and improve quality of life. Moreover, acceptance of exercise as part of a good recuperation and standard of care has been gaining momentum in the medical community.

After surgery, I want my patients to begin an exercise program designed to ameliorate the adverse effects of surgery and help them regain their pre-cancer fitness level. Exercise that focuses on functional fitness will help them be able to perform the activities of daily living and return to the activities that they enjoy.

My patients, however, always have questions about exercise. Which exercises should I be doing and which should I avoid? Can I exercise during chemotherapy? Can I exercise if I have lymphedema? How do I exercise safely with osteoporosis? Some patients will need to exercise under supervision while others will be able to exercise independently. The type and scope of cancer and the overall medical condition and fitness level of a patient will determine whether or not a supervised program is needed. This course, *Cancer Recovery Specialist*, will be an essential guide for those who train cancer survivors.

For those who do not live near a major city, it might be difficult to find a fitness professional that has experience working with cancer patients. This manual provides the fitness professional access to fitness tools specifically created to help their clients. Exercise is a simple and affordable treatment.

Use the exercises in this manual as a guide to building an individualized routine that works well and feels right for your client. As a fitness professional, you may already notice an increasing number of clients who have been personally affected by cancer – this course will help you to work with these clients to assist them in improving the quality of their daily living.

This course will teach you how to prevent injury. Cancer survivors need to be patient; returning to the pre-cancer fitness level takes time and cannot be rushed. You will learn the implications of your client's particular surgery and the corrective exercises needed to improve recovery. This *Cancer Recovery Specialist course* is a great way for trainers to teach these clients safe stretching and strength training exercises. My patients, who participate in exercise programs, say that it is empowering and gives them a sense of control and accomplishment.

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Introduction

The importance of maintaining an active lifestyle and engaging in regular exercise has been emphasized more and more in recent years as the benefits for health, weight management and general well-being have been demonstrated in numerous studies.

At the same time, the number of persons in the United States with a history of cancer has continued to rise, and these individuals often face unique challenges with regard to exercise, either during their cancer treatment or in the months and years after their treatment is concluded.

During and after treatment for cancer, many survivors experience persistent fatigue, deficits in strength and range of motion, and decreased ability to manage the work and home tasks they previously enjoyed.

Exercise and fitness training have special benefits for patients during and after treatment for cancer. During chemotherapy, studies have indicated that exercise may increase fitness and energy levels, improve mood, and help patients better tolerate cancer treatments. After treatment is concluded, exercise can increase strength and aerobic capacity, improve joint flexibility, elevate mood, and assist with resumption of regular activities and work demands. In addition, exercise has been shown to decrease the risk of onset or recurrence of many types of cancer.

Individuals with or at risk for lymphedema after lymph node removal and/or irradiation are a unique group, because for many years it was assumed that using the at-risk arm or leg for strenuous activities increased the risk of developing lymphedema, or worsened pre-existing lymphedema. Fortunately, studies over the last few years have shown these fears to be unfounded, and in fact have suggested that regular exercise, even strength training, may decrease the risk of lymphedema or diminish symptoms of lymphedema already present.

The program outlined in this course is intended to teach personal trainers safe and correct exercises for cancer survivors, with adaptations suggested for particular types of cancer and cancer treatments. You will be able to teach cancer survivors how to perform exercises safely and using good technique to improve flexibility, strength and function. Slow progression of exercise is stressed while monitoring for fullness or aching that can indicate possible problems with lymphedema.

The exercises demonstrated, when used in conjunction with regular follow-up with an individual's medical team, are generally safe both for those at risk for lymphedema and those with lymphedema. Safety and appropriate precautions are emphasized throughout the course. One of the goals of the *Cancer Recovery Specialist* course is to encourage fitness without incurring pain or injury that could trigger or exacerbate lymphedema. This manual will help give you the information you need to begin an exercise program for your clients during and after treatment for cancer, so that your clients can enjoy the many physical and psychological benefits of exercise over the long term.

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Program Background

Cancer is growing part of our everyday world. Most everyone knows of a family member or friend who has battled this disease. As a result, one of the goals of this course is to do whatever possible to help the healing process and to make an impact on a deep level. As a fitness professional, you will work with people of all ages and fitness levels. Your career will bring you in contact with many people who have suffered from the side effects of cancer surgery and treatments. An essential component of the recovery process for these clients is to improve their quality of life through exercise. This was the inspiration for this course, and it is dedicated to these courageous people.

A goal of many people recovering from surgery is to be able to return to the things that they enjoy. Cancer patients often have a difficult time recovering and develop frozen shoulder, stiffness, and numbness due to surgery and treatments. After surgery, it is important to build strength and flexibility in the chest, shoulder, abdomen, and back. Because many of these side effects can be prevented through proper exercise, this course will teach you to implement a series of stretches and strengthening exercises to help eliminate or minimize these side effects.

Sometimes, patients are so overwhelmed by their diagnosis that they do not comprehend the specifics of the chemotherapy or the exact details of the surgery. Reconstructive surgery, such as TRAM flap (Transverse Rectus Abdominis Myocutaneous) and LAT flap (Latissimus Dorsi Tissue), changes muscle location. It is important to strengthen certain muscle groups that will have to compensate for the changes that have occurred during the surgery. The program designs of this course teach the personal trainer how to show their clients, through clear and concise direction, the very important tools and methods for exercising properly and safely. Cancer survivors need these corrective exercises. It is imperative for them to reach a fitness level that provides confidence and peace of mind.

The value of adding a fitness professional to the patient's team is finally receiving the acknowledgment that it deserves by the medical community.

Course Description

The cancer exercise program outlined in this course, developed by Recovery Fitness® and brought to you by National Federation of Professional Trainers, is a series of stretching and strengthening exercises designed to improve recovery. These exercises range from stretches done as your client progresses from being in bed, moving to a chair and finally to the point where they are able to lift light weights. This course teaches the personal trainer how to work out, when to work out, and the duration and frequency of the workouts that are safe for cancer survivors. The cancer exercise program makes the difficult experience of having cancer a lot easier. As you read through this manual, you will notice that we repeat a lot of common themes. These will help to reinforce the underlying rationale for our exercises.

This course offers comprehensive advice so that you can begin improving your client's physical and emotional health and help them reclaim their life beyond cancer. Through exercise, you will teach them how to regain some control over their body, manage side effects more successfully, and increase their body's ability to heal. You will be given clear and concise directions to safely start an exercise program, and the tools to make exercise a lasting part of your client's lifestyle. You don't need a gym to perform the exercises that this manual recommends; most homes will have everything your client needs. We will use easy-to-perform exercises with easy-to-read descriptions. This course is intended to assist personal

trainers currently working with people battling the disease as well as those who have been in remission for years. The recommendations in this program can help make your clients stronger, fitter, and mentally prepared to battle cancer.

Why do personal trainers need to equip themselves with stretching and strength training exercises for cancer survivors?

- Hospital or clinic classes may be too far away for your clients
- Fitness centers may not be hygienic enough for their weakened immune system
- There may not be a suitable cancer exercise program in close proximity
- The client may prefer to exercise in the privacy of his or her home
- The variety of exercises presented will help your client by reducing boredom in the routine

When some people hear the word exercise, they might immediately think about a difficult gym class or boot camp. The exercises in this manual are gentle, safe, and effective. They are not high intensity. Exercise might be the last thing on your mind of a cancer survivor after a cancer diagnosis. As thousands of cancer survivors are finding, a good fitness program will help them build up strength, improve mood and help recovery.

Exercise should be part of the treatment plan because it may:

- Decrease body fat to help lower estrogen levels
- Reduce circulating testosterone
- Improve the immune system
- Decrease insulin levels
- Reduce pain from cancer treatments

Chapter 1: Exercising Safely

Exercise may be the furthest thing from the mind of your client after a cancer diagnosis. Even if they have never been active, exercise can become one of their favorite activities. Have them ask their doctor for medical clearance before starting to exercise, because each person is unique and heals differently. With more medical professionals recommending exercise to their patients, it is imperative for cancer survivors to learn how to exercise safely. A good exercise program will help to reduce the side effects of surgery and treatments. These side effects can include fatigue, neuropathy, decreased range of motion (ROM), weakness, lymphedema, and a significant emotional toll. Once your clients start to exercise and have less pain, stiffness and more energy, they will be motivated to continue. Cancer can be a wake-up call to make healthy lifestyle changes.

Exercise may reduce the chance of recurrence, and it is therefore more important than ever to add exercise to a recovery plan. For those who have been active prior to their diagnosis, this is great news. The exercises described in this manual will help them get back to the activities they enjoyed. For the cancer survivors who are inactive, this manual will give you the tools that you need to get them started in an exercise program that is part of a healthy lifestyle.

Before You Begin

Your client will need to speak to their health professional before beginning the exercises contained in this manual. Their particular surgery, treatments, fitness level and healing speed will guide the progression of the exercises. Your client's health and recovery process is always changing. Therefore, it is important to regularly monitor blood count, muscle and joint pain, nausea, and fatigue. There may be lingering impairments or health concerns that need to be evaluated by a physical therapist or lymphedema therapist.

Your client should meet with their oncologist to review the exact nature of the treatments so that they understand the potential side effects of the treatments. This way they will be able to understand their exercise plan in relation to their unique situation. For example, Arimedex may make the joints or muscles sore. Some medications affect balance and cardiac function, or increase the risk of dehydration. It is crucial that the trainer and the cancer survivor understand the health issues that may be encountered as a consequence of the surgery or treatments. This will include learning which muscles are affected, which lymph nodes are removed, and the cardiac and pulmonary effects of radiation and chemotherapy.

Exercise Goals

Goals should be specific and realistic. For example, the client may want to lose weight and increase muscle mass. If flexibility is an issue, the goal may be to improve the range of motion. Other goals might be to become stronger, have a good quality of life, better mood, or to decrease the chance of recurrence.

It is helpful to have both short term and long term exercise goals. Goals should be able to be adapted to changes in work, health, and family situations. If one is new to exercise, select an activity and set an achievable goal. Slowly add exercise to their daily activities and find something that works with their lifestyle.