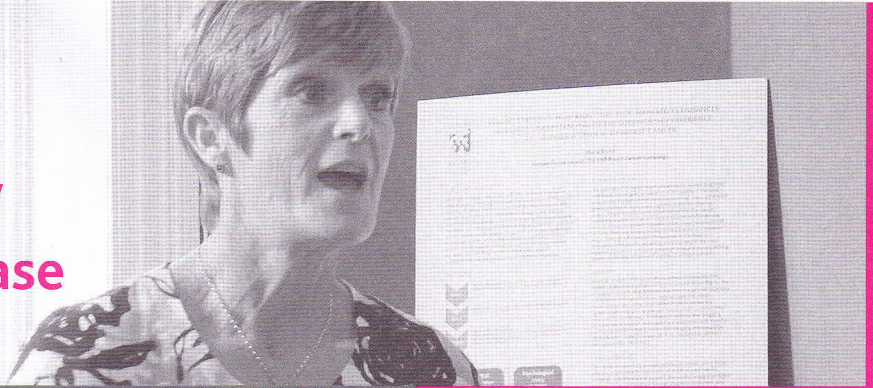


# The Murphy (METs) Programme: Reducing Your Risk/ Recurrence of Disease

By Marie Murphy



## Introduction

Exercise has been shown to improve cardiovascular fitness, muscle strength, body composition, anxiety, fatigue, depression, self-esteem, and health related quality of life in cancer survivors. Recent research has also demonstrated that it can reduce your risk of cancer recurrence, particularly for breast and bowel cancers.

## Cardiovascular Training

To reap all the benefits cardiovascular exercise (walking, cycling, swimming etc.) can provide, you need to be sure that your fitness routine is providing you with the right number of METs. METs are the rate at which our bodies use oxygen (metabolic equivalents). If you accumulate >15 METs every week, then you get significant benefits in terms of fighting cancer. Studies have shown as little as 9 MET/Hrs of physical activity over a seven day period increases survival rate for breast and bowel cancers. Your fitness level has a direct impact on how many METs you expend per minute. So let's say it takes you 16 minutes to walk a mile, your pace is 3.75 miles per hour, which corresponds to 4.3 METs per hour. If you walk 3 ½ hours over a seven day period you accumulated 15 METs for your week.

## Resistance Training

Resistance training is moving to the forefront as a major behavioural lifestyle activity for improving your health, preventing disease, and reducing the risk for premature death.

Upper-limb dysfunction is a commonly reported side effect of treatment for breast cancer and may include decreased shoulder range of motion

(ROM – the range through which a joint can be moved) strength, pain and lymphedema. Historically, there were concerns that breast cancer survivors with lymphedema should not engage in resistance training. There are now multiple trials that have demonstrated that such physical activity is not only safe, but actually reduces the incidence and severity of lymphedema. A resistance training programme that incorporates the 10 major muscles of the upper & lower body completes 15-20 repetitions for each exercise and repeats the routine twice weekly has been shown to have the greatest benefits.

## Nutrition

A good cancer diet is similar to a cancer prevention diet. The main differences are that people undergoing chemotherapy may have higher nutritional needs and poor appetites. It is very important to eat the most nutritious foods you can get. A diet that is high in vegetables, fruits, whole grains, beans, fish, and low in fat, high in fibre is cancer protective. Cancer treatments may decrease appetite and lower the ability to digest food which may interfere with your body's ability to absorb and use nutrients. Focus should be placed on getting enough calories to keep up your strength and eating as healthy a

diet as possible to boost your immune system to help deal with possible nutritional deficiencies. Think of our Irish Flag – plenty of green, white and orange fruits & vegetables. Make sure that your diet contains plenty of low-fat protein, such as cold-water fish (salmon, sardines, and mackerel), beans, and white meat (chicken or turkey). Protein rebuilds muscle and tissue which is particularly important when your body has undergone chemotherapy, surgery and radiation.

Good fat such as olive oil and omega 3 oils including flax seed oil and fish oil are important, while processed fats and oils, such as Trans and hydrogenated fats in margarines and fats used for baking should be avoided.

For more information please go to- [www.mbsfitness.com](http://www.mbsfitness.com) or email

## Marie's guidelines:

Carbohydrates: >5 grams/kg/day

Protein: 1.2 – 1.7 grams/kg/day

Fat: <1.5 grams/kg/day

Water: 2 L. women, 3 L. men

[murphyprogramme@gmail.com](mailto:murphyprogramme@gmail.com) 

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