

# 'Rehabilitation & Exercise'

- the most powerful prescription

Lou James (MNZM)



PINC & STEEL  
CANCER REHABILITATION TRUST

STEEL  
PROGRAM  
REINFORCING STRENGTH FOR MEN WITH CANCER

PINC  
PROGRAM  
GIVING WOMEN WITH CANCER STRENGTH

NEXT  
STEPS  
ENHANCING RECOVERY

PADDLE  
ON  
SUP REHABILITATION

- ▶ Cancer treatment complications and how cancer rehabilitation and exercise can help
- ▶ Cancer rehabilitation and exercise programmes available in New Zealand



# ONE PATIENT ONE PHYSIO ONE STEP AT A TIME

GYNAECOLOGICAL CANCER PATIENT, RACHEL  
FOOTE WITH PINC PHYSIO, MEGAN SCHMIDT



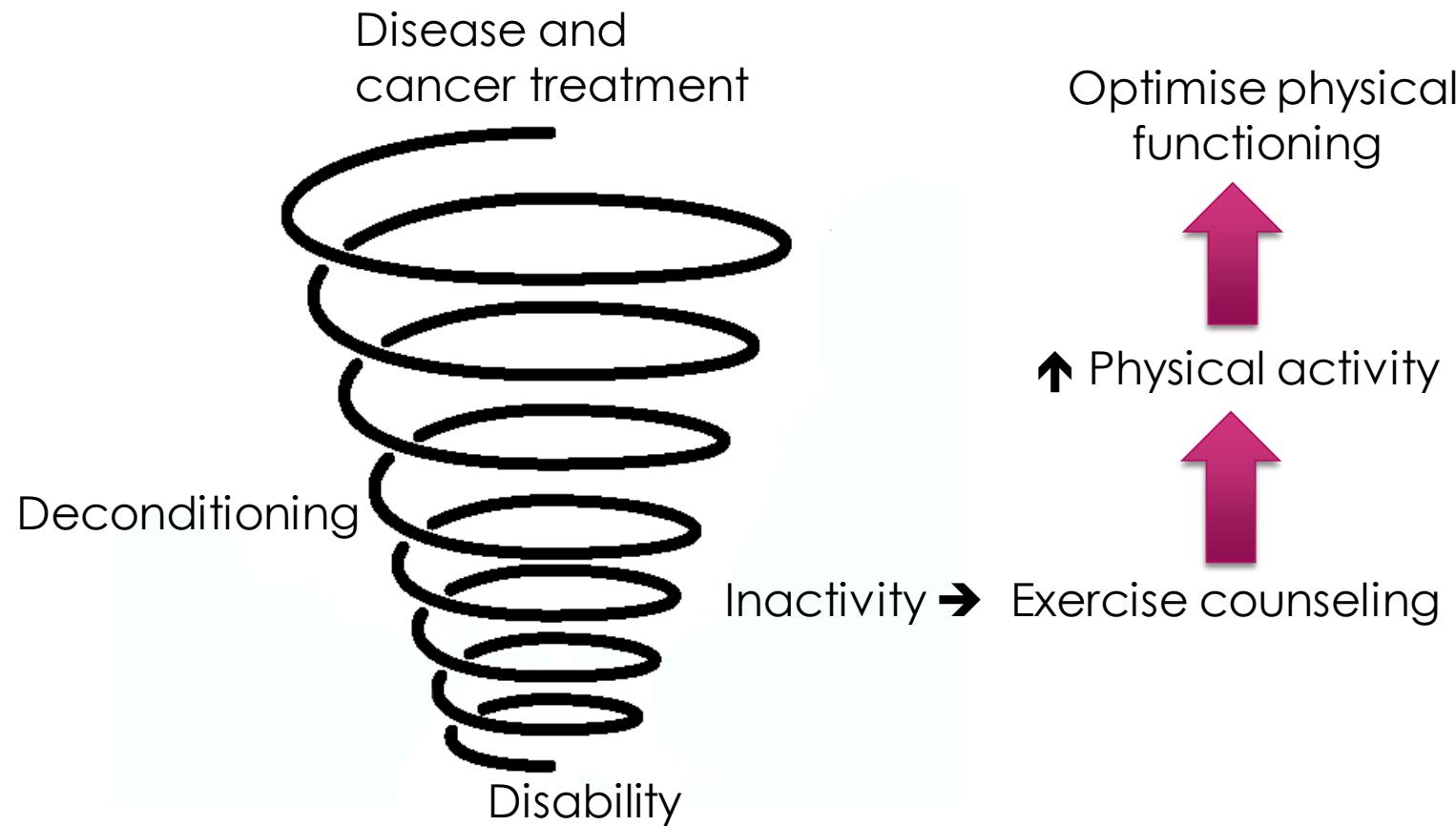
PINC  
PROGRAM  
GIVING WOMEN WITH  
CANCER STRENGTH

- ▶ "Cancer **rehabilitation** is a process that assists a person with a cancer diagnosis to obtain **optimal physical, social, psychological and vocational functioning** within the limits created by the disease and its treatment."

Dr. Martin Chasen, Division of Palliative Care,  
Élisabeth-Bruyère Hospital, Ottawa, Ontario

► There have been great strides in clinical treatment and **people are now living longer with secondary cancers than ever before**, but with little or no **rehabilitation support**, people are faced with **a constant cycle of illness, treatment and recovery**.

# Deconditioning – one of the most prevalent cancer related treatment complications



# Musculoskeletal System

- Inactivity causes muscles to weaken and shorten
- Muscle imbalances can affect the health of your joints and affect posture
  - Pain, arthritis and osteoporosis
  - Activity intolerance



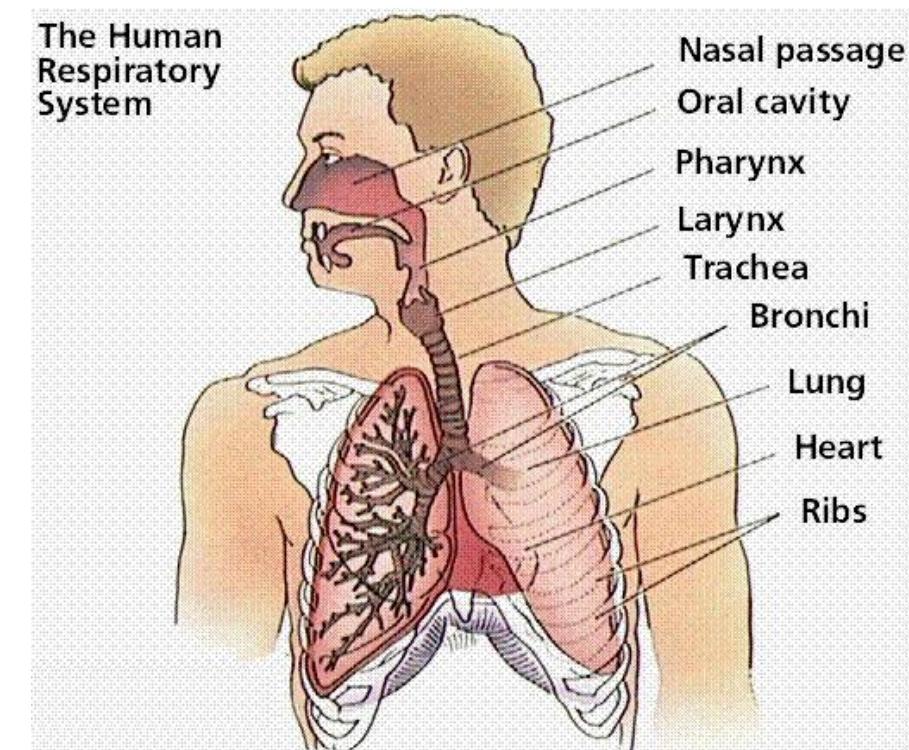
## The Good News:

- The **musculoskeletal system** can be improved by doing strengthening, stretching and cardio exercises to build up weakened muscles.



# Respiratory System

- Lack of use of the respiratory muscles also weaken from inactivity
- Rib cage muscles can become tight and increase the work needed to breath



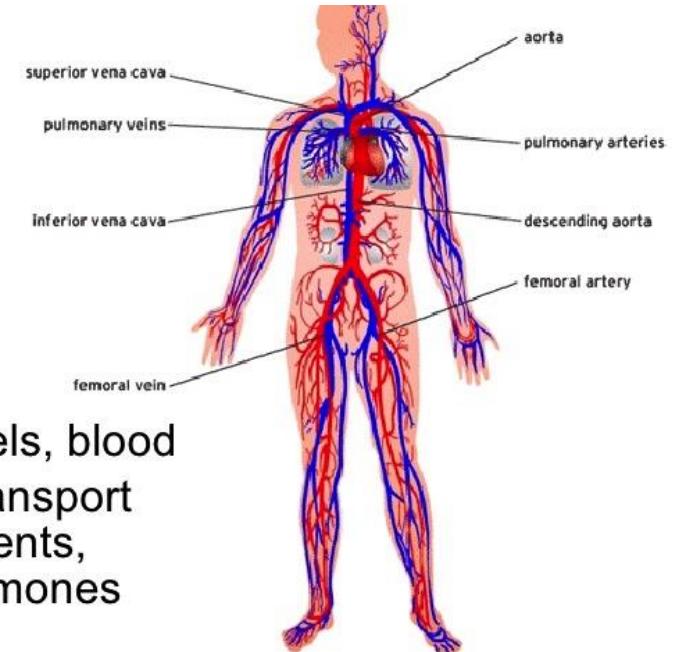
## The Good News:

- **Cardio exercises** and stretching and strengthening of the trunk and abdominal muscles your respiratory function can improve significantly



# Cardiovascular System

- Reduced cardiorespiratory fitness is associated with:
  - Reduced mobility, heightened symptoms, functional dependence and increased risk of cardiovascular problems



- Heart, vessels, blood
- Function: transport gases, nutrients, wastes, hormones

## The Good News:

- When you engage in physical activity the cardiovascular system is affected immensely
- It will help your heart muscles, skeletal structure, your blood vessels and red blood cells will grow in size and number when you perform regular exercise



- There is a growing body of literature supporting cancer rehabilitation and its potential to **alleviate or prevent physical impairment and functional decline in cancer patients**



# Research

- Walking for just 30 minutes 3 x per week could improve quality of life for those with advanced cancer a new study published Feb 2017 BMJ.
- Recent research in the Netherlands Cancer Institute showed exercising during chemo:
  - Can diminish some of its worst side effects, such as nausea, weakness, pain, loss of muscle strength and overall fitness
  - Can help patients tolerate higher chemotherapy doses

# Cancer rehabilitation can help in:

- maintaining independence,
- decreasing pain,
- improving sleep,
- decreasing nausea and constipation,
- enhancing energy levels,
- improving physical functioning
- and quality of life



- While rehabilitation and exercise can not eliminate cancer's assaults on the body, it can certainly decrease and decelerate the impact on **function, strength and stamina.**
- The aim is to allow people to **live to their own maximum potential**, performing at the limit of their physical and mental capacity with control and independence whenever possible.

# Cancer rehabilitation and exercise programmes available in New Zealand





# PINC Programme -

Individualised sessions with a cancer rehabilitation physiotherapist

ONEPATIENT ONEPHYSIO  
ONE STEP AT A TIME

BREAST CANCER PATIENT, LINDA SKELTON  
WITH PINC PHYSIO, MEGAN SCHMIDT



# Pinc NEXT STEPS Programme

Physiotherapist lead group classes for women with cancer

## COMBINING THE BEST OF

- YOGA - FOR FLEXIBILITY
- PILATES - FOR STRENGTH
- CARDIO - FOR FITNESS





# PaddleOn Programme

Physiotherapist lead group stand up paddling  
rehabilitation classes for women with cancer



# The Pinc & Steel Cancer Rehabilitation Trust

Making cancer rehabilitation accessible  
for New Zealanders



**Everyone living with cancer should have the opportunity to  
have rehabilitation support  
to help them be as independent as possible,  
function at optimal level,  
manage their pain and fatigue and  
improve their quality of life**