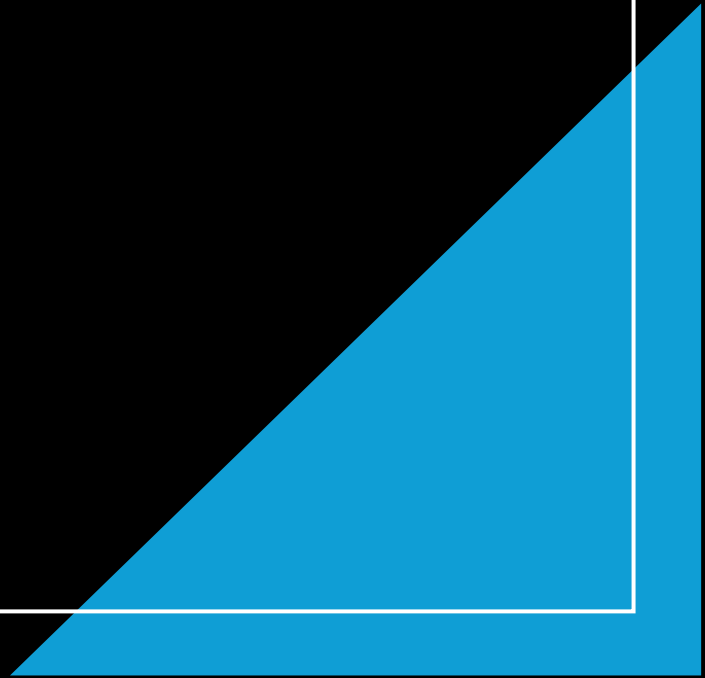




EXERCISE IS A PROVOCATIVE MEDICINE

Donna Wilson RN, MSN, RRT, Personal Trainer
Clinical Fitness Specialist



Exercise is known for:

- Preventive
- Complimentary
- Rehabilitative
- Targeted Medicine
 - Enhance symptom control
 - Tumor biology
 - Delay disease progression
 - Increase overall survival



Exercise is Medicine

Exercise is safe and effective

Exercise acts synergistically to improve the effectiveness of chemotherapy

Exercise may mechanically suppress tumor formation

Physical activity associated greater survival benefits

Exercise is the key field of interest in the management of chemotherapy treatment for symptom control

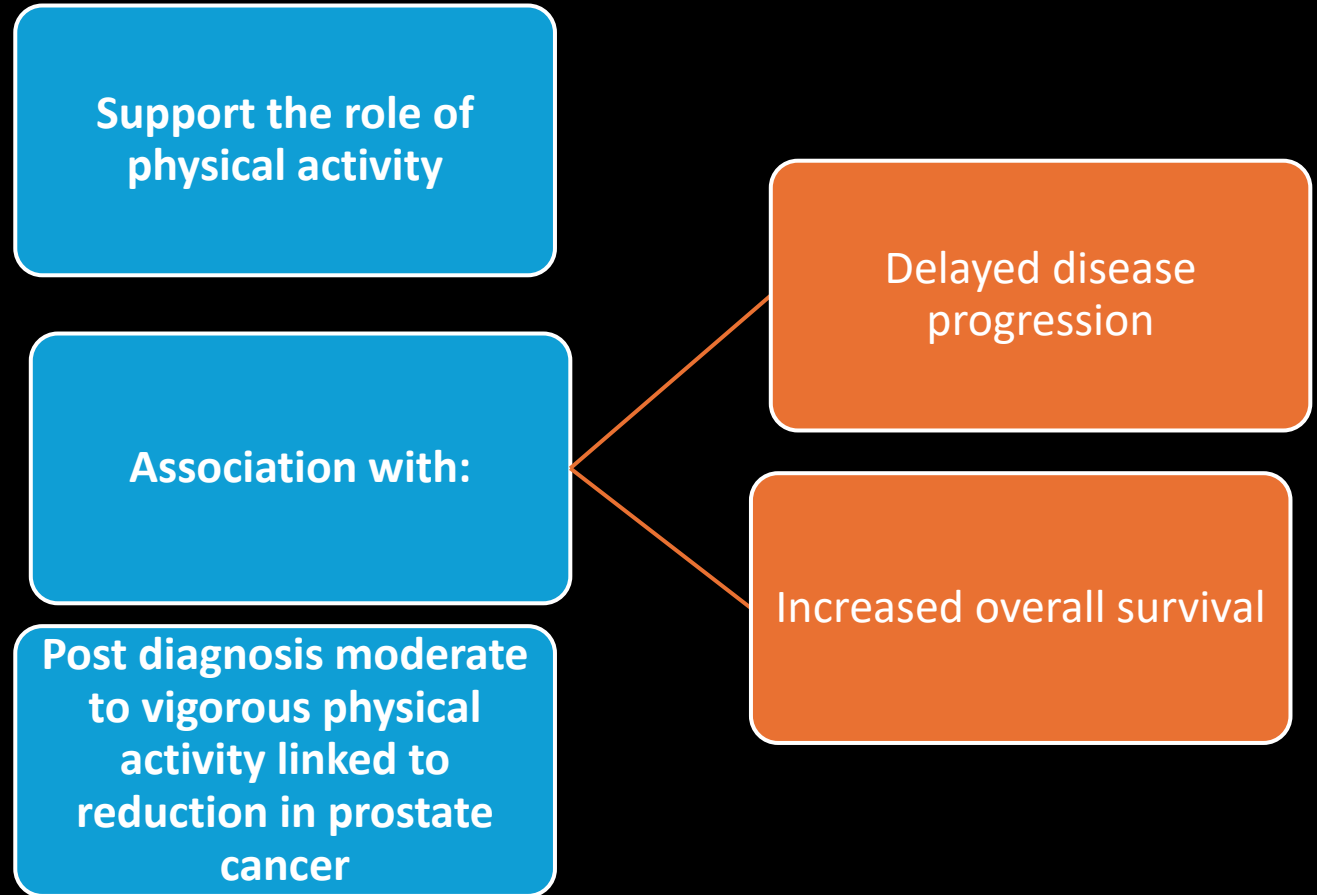
Research-
currently in
progress
patient
focused
clinical trials

Aerobic exercise has been shown to stimulate natural killer cell production, mobilization and infiltration in to tumors, producing an approximate 60% reduction in tumor incidence and growth

Aerobic exercise has been shown to produce 80% reduction in tumor growth

Aerobic exercise improves blood supply as a mechanism to enhance chemotherapy results in tumor cell death

Epidemiological Studies



ADT- Androgen Deprivation Therapy

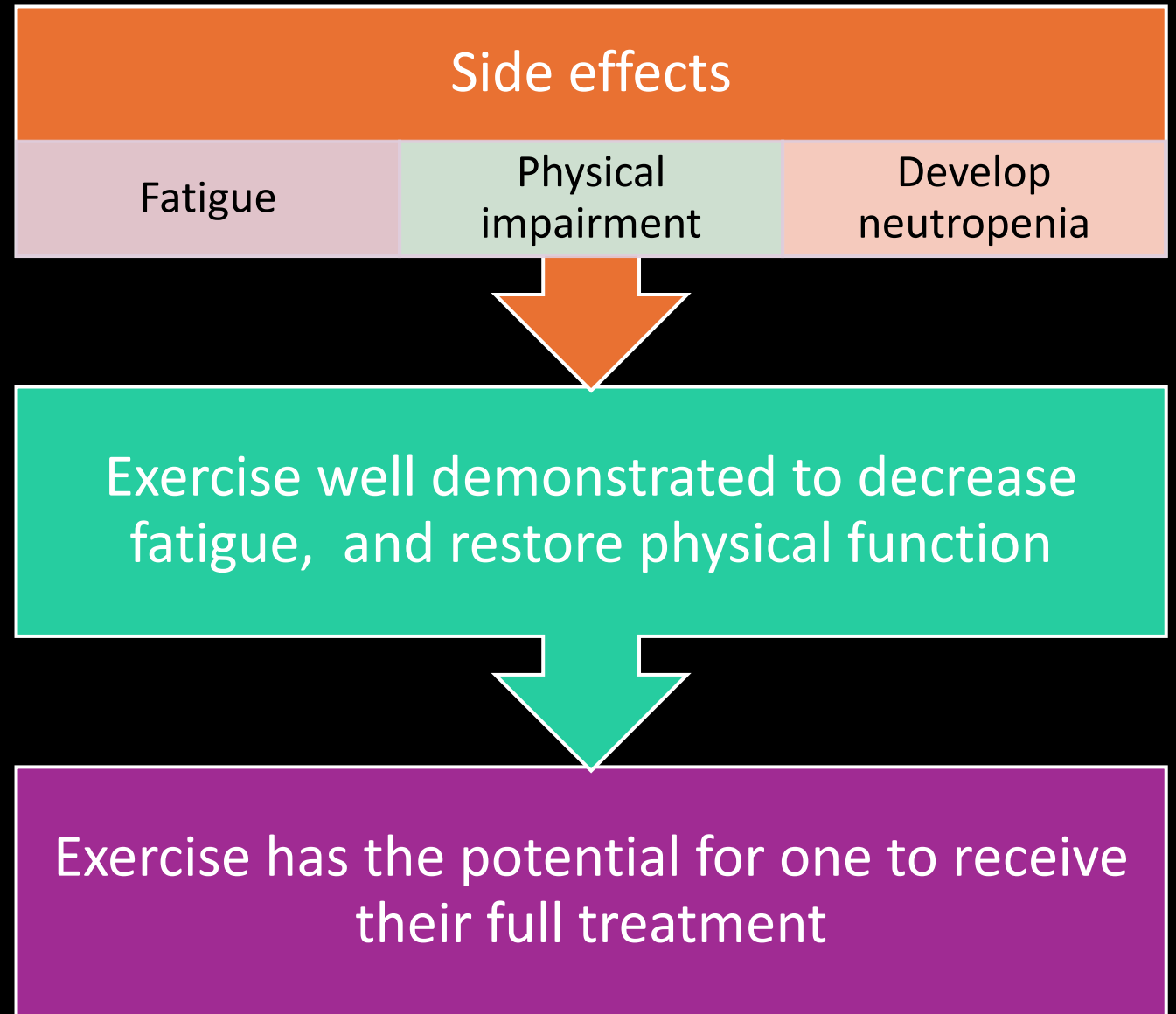
Decreased muscle function

Inhibited muscle growth

Inhibited muscle repair

Increased muscle atrophy

Exercise and Chemotherapy



Exercise Modality

Aerobic exercise-cycling, treadmill cross-trainer ergometers,
walking, knee lifts

Time:10-30 minutes

3 times a week

Moderate Intensity: weight training, isometrics

Time: 10-20 minutes

3 times a week

High Intensity weight training

Time: 20 minutes

3 times a week

Setting Up An Exercise Program At Home

Cardio Fitness

- walk, jog, knee lifts, stair climbing, dancing,
- step-ups,

Resistance Training- stand or sitting

- towel, elastic bands, weights, isometrics

Body Weight exercises

- wall squats, push-ups, sumo squats, step-ups, lunges, calf raises

Core

Walk the ceiling

Hip bridge

Tighten abdominal muscles

Stretching-
flexibility
movements- arm
circle, leg swing

How to Assess Exercise Performance at Home

Monitor

- Monitor level of breathless on a scale 1-10
- 1 normal breathing.....10 breathless

Leg

- Leg strength-wall sit-how long
- 30-60 seconds everyday

Balance

- Balance-standing on one leg-how long
- 10-60 seconds on each leg

Exertion

- Do you tire easily-rate level of fatigue
- 1 feel fine.....10 bone tired exhausted

Motivation

Once in motion stay
in motion

The pain of not
exercising becomes
greater than the
pain of doing it

Change do not stay
the same

Take action exercise
and not SIT

Become more
creative

Be consistent make
it a habit or ritual

Transition to more
physical movement

Monitor change –
improvements

Any Exercise is Better than
NO Activity

There is Clinical Evidence

